TRABAJO DE FIN DE GRADO EDUCACIÓN INFANTIL

Annual Syllabus for 3rd Year Preschool: STEAM and PBL in English Learning

Doble Grado de Educación Primaria y Educación Infantil

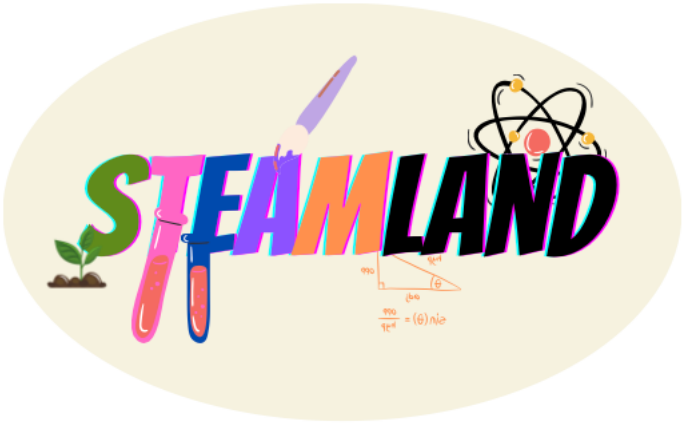
Curso 2022-2023

Alumna: María Álvaro Miranda

Directora: Lyndsay Renee Buckingham Reynolds

Curso: 5º de Educación Primaria y Educación Infantil

Annual Syllabus for 3rd Year: STEAM and PBL in English Learning



Trabajo de fin de grado
Annual Syllabus for 3rd ECE
Autor: María Álvaro Miranda
Directora: Lyndsay Renee Buckingham Reynolds

A mi familia, amigos,
a Carlos y Papá,
y a los que me miran desde arriba:
por quererme tanto y tan bien;
por acompañarme en esta singladura.

A mis chicos de la clase roja:
por haberme enseñado que lo esencial es invisible a los ojos;
y que solo se ve bien con el corazón.

Y a mi madre:
por creer en mí hasta el infinito;
y demostrarme que lo imposible es posible.
Por ser mi sol entre las nubes de tormenta.
Y, sobre todo, por ser simplemente tú: gracias mami.

INDEX

Abbreviations

ACNEAE: Alumnado Con Necesidades Educativas de Apoyo Educativo

ACNEE: Alumnado con Necesidades Educativas Especiales

CCI: Competencia ciudadana

CCL: Competencia en comunicación lingüística

CCR: Competencia creativa

CCU: Competencia cultural

CD: Competencia digital

CMCT: Competencia matemática y competencia en ciencia y tecnología

CP: Competencia plurilingüe

CPSA: Competencia personal, social y de aprender a aprender

ECE: Early Childhood Education

PBL: Project-Based Learning

STEAM: Science, Technology, Engineering, Art and Mathematics

UDL: Universal Design for Learning

1. Resumen/Summary

1.1. Resumen

En el presente Trabajo de Fin de Grado se expone una programación anual para Educación Infantil, concretamente para 5 años, dentro del segundo ciclo de esta etapa, desarrollado durante tres proyectos y quince unidades didácticas, recogidas a lo largo del trabajo.

La propuesta se desarrolla en torno a la enseñanza del inglés en la etapa de Educación Infantil con el fin de conseguir acercar este idioma al alumnado y desarrollar en ellos motivación intrínseca que los acompañe en el resto de su vida escolar. Para ello, se ha diseñado un proyecto denominado STEAMland donde STEAM e inglés son los dos pilares de la intervención educativa, para fomentar que el alumnado aprenda inglés a través de la experimentación y la manipulación. El contexto de aprendizaje será un colegio ficticio denominado *Kite School*, localizado en Torrelodones, noroeste de la Comunidad de Madrid, de carácter concertado.

Para ello, la metodología principal que se va a seguir es el Aprendizaje Basado en Proyectos, concretamente en tres a lo largo del curso, con el fin de que el alumno sea el eje de su proceso de aprendizaje, con su propia diversidad para potenciar un aprendizaje significativo. Los proyectos se han diseñado con la temática de STEAMland, un universo nuevo protagonizado por STEAM e introducido unidad a unidad gracias a la metodología *storytelling*, para fomentar el aprendizaje de la lectura a lo largo de esta etapa educativa.

Palabras clave: Educación Infantil, Programación Anual, inglés, STEAM, Aprendizaje por Proyectos, Storytelling

1.2. Summary

The present end-of-degree project consists of an Annual Syllabus, specifically for 5-year-old children, aimed at the second cycle of Early Childhood Education, developed in three different projects and fifteen didactic units.

This proposal is developed from the perspective of English language learning in order to make it more accessible for children and develop their inner motivation, which will accompany them through all their academic life. For it, the focus designed is called STEAMland, where STEAM and English are the two foundations for the educational intervention, to enhance children to learn English through experimentation and manipulation. The specific context for the proposed syllabus is a fictional school called *Kite School*, located in Torrelodones, northwest of the Community of Madrid, in a semi-private bilingual school.

For this, the main methodology will be Project-Based Learning, including three projects along the academic year, to allow students to be the center of their learning process, with their own diversity in order to enhance meaningful learning. All projects have been designed to follow the STEAMland there: a new universe where STEAM is the main focus, introduced in all units thanks to the *storytelling* methodology, which encourages reading learning through all ECE.

Key Words: Early Childhood Education, Annual Syllabus, English, STEAM, Project-Based Learning, Storytelling

2. Introduction

When learning English at school, the focus was very repetitive and unmotivating since all concepts were the same all over my academic years and there were no elements of surprise or creativity. Furthermore, all our learning outcomes were designed in order to pass our exams, but nothing more. All over my different internships these past years, I have developed another way of analyzing and constructing how English should be taught. In any language learning, motivation and contextualization should be the two pillars that sustain all the learning planification and practice. Also, I consider that one of the best ways of providing meaningful learning is by creating meaningful and cooperative situations in which the students should work together to achieve a common goal.

For this reason, the aim of this Final Degree Project is to elaborate an annual teaching syllabus designed for the 3rd year of Infant Education. The present syllabus enhances English learning through STEAM methodologies and activities, based on three different projects distributed through the academic year. The prior contextualization of each didactic unit will be introduced with a story, in which specific challenges and questions related to STEAM learning will be provided.

Project-Based Learning is the main methodology chosen for the syllabus, due to the incrementation of motivation and autonomy in children within all ranges of ages. This specific way of working provides students with situations in which collaborative and teamwork abilities are vital to achieve a commo goal. Furthermore, all the activities developed in English will be under STEAM methodologies and bases, so children can learn their second language contextualized by the main topics related to STEAM.

All three projects have been designed to introduce a challenge for the students to solve, to activate their inner motivation towards their own learning process. In order to do this, the didactic units will be introduced with a story, from which all the class will be actively involved in the dynamics, englobed in a bigger

project. The syllabus introduces STEAM thanks to specific characters involved in every story, this will help to recognize which situation will be presented and resolved in English.

In the present paper, English has been chosen as the main focus because of the necessary importance that should have in Early Childhood Education. Also, language learning provides a necessary transversal education, in which all learning areas are connected, giving the students the chance of connecting the concepts learnt in a meaningful way. This is one of the reasons why I decided to include STEAM activities in English, because it provides the students with a context in which they can learn different contents of several areas (mathematics, language, social and natural science…) in English, preparing themselves to develop their language knowledge for further experiences outside the academic context.

To sum up, the annual syllabus has been designed in order to provide a meaningful experience in the English learning by using PBL and stories as main methodologies to increase inner motivation. Also, all English learning will be contextualized by STEAM activities, from which proper contents of this subject will be introduced and withhold.

3. Theoretical Framework

All the present syllabus is created to integrate STEAM learning in Early Childhood Education using PBL and Storytelling methodologies as main resource to achieve several objectives. Within all, the educational practice is based in the Spanish educational system, which means that the legal framework should come from official laws and decrees, which are the following:

- *Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil*

- *Decreto 36/2022, de 8 de junio, del Consejo de Gobierno, por el que se establece para la Comunidad de Madrid la ordenación y el currículo de la etapa de Educación Infantil*

These two decrees have been updated in order to respond more accurately to current educational challenges, giving the chance to teachers to interconnect all subjects and learning concepts. The concept of key competences has been introduced to ECE with this new curriculum, since before it, it was only applied from Primary Education up to Bachillerato.

Kite School, context for the present syllabus, offers a bilingual educational proposal, integrated in the Community of Madrid bilingual schools project, being regulated by the following normative regulation.

- *Orden 1434/2018 de 19 de abril de la Consejería de Educación e investigación, por la que se regula la extension de la enseñanza bilingüe español-inglés en el Tercer ciclo de Educación Infantil en los centros privados concertados bilingües del ámbito de gestión de la Comunidad de Madrid*

All the contents, objectives and evaluation criteria has been selected from these two main resources. Since the law was renovated last year, most schools

are implementing gradually. In the *Decreto 36/2022, de 8 de junio, del Consejo de Gobierno, por el que se establece para la Comunidad de Madrid la ordenación y el currículo de la etapa de Educación Infantil* is specified several *competencias* and *criterios de evaluación*, which are specified along the present syllabus.

Specific for ECE, both these decrees enhance students' development in several dimensions, such as physical, emotional, affective, cognitive, social and artistic. The aim of this diversification is to provide meaningful learning experiences, increasing autonomy and incrementing their self-concept and self-esteem.

4. Contextualization

In this section, all the school contextualization will be defined in order to know exactly which would be the specific background for the didactic syllabus. Also, all main characteristics of the students will be included to respond not only their academic profile but socio-cultural one.

The fictional school on which is based the syllabus is called Kite School. It is in Torrelodones, in the Community of Madrid, a township located 29 kilometers northwest from the city center. The population is considered to have a high socio-cultural level, being one of the towns in Madrid with higher rent per capita. The school is located 10 minutes walking from Torrelodones' town center, in a newly built residential area, next to the main shopping center in Torrelodones and other public facilities such a rugby and soccer fields, many parks and restaurants and a hospital. In addition to this, Torrelodones government has invested large amounts of money in the past 10 years to reinsure this area, by creating a shortcut to access more easily to the A6, as well as constant surveillance of the area.

As for the school itself, Kite has two main buildings, all inaugurated in 2012. The first building, which is located in the right part of the school, holds all the ECE and Primary students. The left building was specifically designed for the Secondary and Baccalaureate students. Both buildings are interconnected in several places, being around a patio that conforms the playground for Primary children. Furthermore, Kite school has their own outdoors basketball, football, tennis and volleyball court, as well as an indoor multipurpose sports center.

The patio of both buildings is used as the Primary playground. Also, the school also has several libraries divided for each specific educational stage, two laboratories and classes specialized in music, with instruments and dancing area. Also, Kite school has a theatre with a capacity for 150 people, that is not only available for the school but other Torrelodones theatre companies. The school is composed by 120 teachers, a psychological and psychopedagogical department, two counsellors, an infirmary department and three therapeutic pedagogues.

Specifically, ECE can use all spaces at school during lessons or in their recess time. Nevertheless, the theatre, libraries or laboratories need to be booked in advanced, so it can be used only by a class.

Kite is a semi-private (*concertado*) school, which means part of the funds comes from the public government, whether other monetary proportion is provided by private organizations or from the student's families. All the educational stages, including ECE, Primary, Secondary Education and Baccalaureate are covered, adding the 0-3 years stage as well. It was funded in 1964 by a Diocesan Catholic group and provides bilingual education in all the educational stages.

English is taught thanks to BEDA program, specified in BEDA Kids Program in Preschool and ECE. This program was funded by both Escuelas Católicas de Madrid and Cambridge English Language Assessment. It was created in order to provide a much more meaningful English experience at schools by introducing this language interconnected with student's mother tongue- Spanish- gradually through their academic life (from preschool to baccalaureate). Also, it facilitates to the schools that are part of this program to easily certificate student's level of English thanks to Cambridge Official Exams and other services such as specific training for teachers. Also, the school has a team of 7 language assistants that rotate in all English classrooms, which help with the previous planning of the lessons, materials and the whole dynamic.

As for the human resources, all teachers are English Teachers in ECE, which helps to integrate English within all areas of study. Besides that, there are several moments during the day, specifically when an English activity is being hold, that teachers count with the participation of language assistants and support personnel, for specific students with special needs. In ECE there are three classes per level. About English Sessions, it increases gradually, starting with 2 sessions for 3 years old, being increased to 3 sessions for 4 years and ending with 5 sessions, one each day, for 5 years old.

As for the student's contextualization, Kite school is in a medium and high socio-cultural level, which means most students come from the school's surroundings. In total, there are 90 students in each grade in ECE divided into four classes. Not only English is learnt in the proper subject, but also in Social and Natural Science and Drama. The group in which is contextualized the present syllabus is a 5-year-old group, composed by 20 students, 11 boys and 9 girls. There are a total of five English sessions per week, of approximately 50 minutes each. All students have learnt English before this academic year, so they have a good level in this language. Furthermore, all teachers from previous years remark that the academic level of this group is remarkable, being able to read simple words and write in a basic way.

5. Objectives

5.1. Stage objectives

For ECE, all general objectives are subtracted from the *Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil.* With this, in ECE the following objectives are developed:

a) Acquire knowledge about their body and potential possibilities of action based on their own characteristics, developing their autonomy.
b) Observe and explore their natural, social, and familiar context.
c) Acquire progressively autonomy in their daily activities.
d) Develop their emotional and affective capacities.
e) Socialize with others in equality, acquiring progressively basic guidelines of coexistence and social relations, with the use of empathy and peaceful conflict resolution, avoiding violence.
f) Acquire communication skills in different languages and forms of expression.
g) Start developing logical-mathematical skills, reading and writing, and movement, gesture and rhythm.
h) Promote, apply and develop norms to enhance equality in between men and women.

5.2. Didactic objectives of the syllabus

As the present syllabus is contextualized in a 5-year class, the main objectives have been written based on the three different areas of the BOCM 36/2022.

Students will be able to:

- Establish interrelation in between objects or situations with the same characteristics.
- Take part in directed and spontaneous activities.
- Respect teachers and classroom rules.

- Locate oneself in space, standby or in movement, using fixed spatial notions.
- Increase their curiosity towards their surrounding world, asking questions.
- Identify and express their own feelings.
- Take care of their natural and social surroundings.
- Come up with hypothesis about the process of an experiment, including the proposed materials, verifying them afterwards.
- Solve challenges or situations using different strategies of decision making.
- Initiate and participate actively in conversations with others.
- Show initiative and curiosity towards learning other languages.
- Respect others in their differences, accepting our personal characteristics and learning from others.
- Perceive reading as an enjoyable activity.
- Control their frustration with peaceful problem-solving strategies.
- Work with others towards a common goal.
- Elaborate musical and artistic creations.

6. Key Competences

In the *BOCM 36/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil, Anexo I,* there are several key competences related to the content, that can be defined within the same document as "performances essential for students in order to progress successfully in their formative itinerary, being able to face local challenges". All 8 competences are reflected in the curricular elements, stated by the current law, and defined hereafter:

⇒ Competence in linguistic communication (*Competencia en comunicación lingüística;* CCL): the present key competence enhances the importance of an adequate communicative exchange between students or with adults, acquiring more complexity along their academic life. Also, it can be remarked the importance of oral language in their necessarily proximity to literature. This competence will be incorporated by integrating different forms of linguistic expression in all sessions (speaking, reading, writing…), rotating in between them to enhance connections in between them.

⇒ Multilingual competence (*competencia plurilingüe*; CP): this key competence refers to the interconnection of different languages and cultures, which results in the development of a more complex linguistic repertoire. This syllabus remarks the importance of this key competence in their learning process, with a different approach that interconnects this key competence with the following one, by interconnecting English with other areas of study.

⇒ Mathematical competence and competence in science, technology, and engineering (*Competencia matemática y competencia en ciencia y tecnología;* CMCT*):* thanks to this key competence, the students will begin to be introduced several logical-mathematical skills, included in scientific thinking. For this, students will learn from their inner curiosity and motivation, how to observe, classify, quantify, and build questions upon

scientific situations. This key competence will also be up to point in this syllabus, included in all STEAM-related activities.

⇒ Digital competence (*Competencia digital*; CD): by including this key competence, students will begin to approach technology as a way to access information, communicate with others and content creation thanks to digital media. Also, it is also included all skills related to a responsible use of ICT's, which can be found in Kite School as computers, tablets or other digital resources, to enhance inner motivation in our students. In the third project of the present syllabus, technology will be used in order to be perceived as a useful tool to help the learning process.

⇒ Personal, social, and learning to learn competence (*Competencia personal, social y de aprender a aprender;* CPSA*)*: this competence provides students with an excellent environment, which is school, for starting to recognize and manage their own emotions, towards themselves and with others. With this, school is a perfect set up where children can learn to live with other people besides their family, using several personal resources and strategies that increases their autonomy and problem-solving skills. This key competence is interconnected necessarily to the first one, since oral communication is the best resource in order to talk and live with others. The school should be a safe place in which students learn how to interact with other without the risk of being judged by their own personal characteristics. PBL strengthens learning to learn, by giving students the responsibility of their own learning, following their inner curiosity and investigating to find answers.

⇒ Citizenship competence (*Competencia ciudadana*; CCI):in this key competence are encompassed all values referred to respect, equality, and coexistence, which provides with a safe place where conflicts are resolved using peaceful and concrete strategies. In nowadays society, is vital to learn how to interact and cooperate with others, respecting everybody's diversity. Also, in this competence it can be found sustainable actions and learning process that help to take care of our near natural and social

context. All activities englobed by the present syllabus enhance cooperation and collaboration in between the students, thanks to PBL, to work together to achieve a specific goal.

⇒ Entrepreneurial competence (*Competencia creativa*; CCR): curiosity, own initiative and imagination are three main aspects of this key competence, since it provides students with different methods and strategies that can be used in near every situation, they are in. This competence is also very important for this syllabus since all learnings will be held thanks to PBL and STEAM activities, in which challenges take an active role to motivate students to learn and discover what is happening around them.

⇒ Competence in cultural awareness and expression (*Competencia cultural*; CCU): this last key competence seeks to develop identity and own express of the student as a way to express feelings and emotions. In this competence, language learning is linked to cultural connotations such as the feeling of belonging or specific cultural manifestations such as art or music. The present syllabus enhances scientific cultural awareness by introducing children into STEAMland, a universe integrated not only with main characters but with real elements that conform STEAM learning.

7. Contents

As specified in the methodology section and by adding PBL as a main component of the present paper, this annual syllabus is divided into three projects, one per term. All projects cover 4 or 5 didactic units, using all contents from the *BOCM 36/2022.* All projects are necessarily linked to one or more stories that provide with specific challenges related to STEAM education, which would be the specific context for English learning.

7.1. Annual Sequence

The present syllabus is set up for being implemented in 2022-2023, starting September 5th until June 22nd. As shown in the table above, all didactic units will have a duration in between two or three weeks, with a total of 15 didactic units.

All projects have been designed around STEAM education, as a way to introduce all concepts and English learning. This syllabus has been designed to include all areas necessarily in the English learning process, so that every area is interconnected, taking into consideration the key competences common to ECE. These three projects are interconnected using the resource of STEAMland and englobe different aspects related to this methodology. They have been designed this way, so they are related to each other, but from different perspectives.

According to the Community of Madrid academic calendar of 2022-2023 (see annex 2), the school year starts on September 5th, when the first project and didactic unit will start. It has been taking into consideration that the first week of every academic year is mostly for adaptation of the students, so that is the reason why the first didactic unit is 4 weeks long. With this project, called **Experimenting with the elements in STEAMland** and subdivided in 5 didactic units, the students will start to discover STEAMland, its elements, and people. Also, by using storytelling and PBL methodologies, the children will have to start solving challenges related to STEAM and learning how to investigate and make hypothesis. Every unit title has been designed in order to provide with a specific

challenge from which the children will learn concepts related to it. The last didactic UNIT, **Christmas in STEAMland**, is the shortest one since most of the activities will be linked to the Christmas period.

After Christmas holidays, the second project will start, being called **Scientists around the world**, which will englobe the investigation of different places, cultures and civilizations around the world. Also, in the first two didactic units, the children will analyze past cultures and civilizations. For this project, will use mostly storytelling methodology to introduce all places, as scientists that can travel all around the world. The aim of this project is that students identify places all around the world and gain more critical knowledge that interconnects with the key competence.

The third trimester is dedicated entirely to the third project called **STEAMland… goes viral,** using ICTs as the main resource and with the aim to become STEAM influencers. In this project, students will learn how to express their learning in other communicative ways, such as short videos, images… Also, it will help to synthetize all learnings done during the year, by providing them with other ways in which they can express their learning and questions. These materials will be uploaded in a private blog, which only parents would have the password, being able to access and see their kids' learnings.

These fifteen didactic units are all interrelated and provide students with constant challenges for them to solve, themselves or with others. STEAMland is our main resource, where students can add more and more concepts gradually through the academic year.

Duration	Unit: Name and number	Weeks
<u>First project: Experimenting with the elements in STEAMland!</u> This project will introduce all STEAM education by doing little experiments, making hypotheses, and learning English in the process, by introducing them STEAMland, which will be the context to our learning.		
September (4 weeks)	1º: Once upon a time, in STEAMland…	September 5th to September 30th

October (3 weeks)	2º: Does water disappear in STEAMland?	October 3rd to October 21st
October-November (3 weeks)	3º: STEAMland is in danger!	October 24th to November 11th
November- December (3 weeks)	4º Not all scientists wear capes	November 14th to December 2nd
December (2 weeks)	5º Christmas in STEAMland	December 9th to December 22nd
Second Project: Scientists around the world! In this project, the students will learn from scientists and experiments all around the world, including other cultures, other parts of the world and their history		
January (2 weeks)	6º Next destination: the past of STEAMland!	January 9th to January 20th
January-February (3 weeks)	7º Wait… there were scientists in Ancient Egypt?	January 23rd to February 10th
February-March (3 weeks)	8º Work like an Egyptian	February 13th to March 3rd
March (2 weeks)	9º Living the Roman dream	March 6th to March 17th
March (2 weeks)	10º Does pizza count as an experiment?	March 21st to March 30th
Third Project: STEAMland… goes viral! This project will sum up all learning by having to use ICT to create social media and a website for STEAMland, in order to become scientific influencers and promote STEAM worldwide!		
April (2 weeks)	11º Breaking news: STEAMland is awesome!	April 11th to April 21st
April-May (3 weeks)	12º STEAM is available to download!	April 24th to May 12th
May (2 weeks)	13º Choreographing experiments	May 15th to May 26th
May-June (2 weeks)	14º Telling our STEAMstory to the world!	May 29th to June 9th
June (2 weeks)	15º #STEAMland	June 12th to June 22nd

7.2. Didactic Units

All didactic units have been organized thanks to three main projects related to STEAM learning. In each unit, it will be explained which contents will be included, as well as the methodologies and activities selected for it. All projects have been designed in order to provide different views and perspectives of the world, the elements and communication, related to STEAM. Also, all units will be introduced with a story named after the unit's name to contextualize the students.

The didactic unit that will be developed in the present syllabus will be UNIT 2. DOES WATER DISSAPEAR IN STEAMLAND? the second unit of the first project (see annex 3)

7.2.1. First Project: Experimenting with the elements in STEAMland!

In this first project, the aim will be to contextualize students and introduce them to STEAM through an invented universe called STEAMland, which will be present during all the academic year. This project will be focus towards experimenting with different elements, and by this discovering new concepts in English. STEAMland will be introduced using storytelling methodology, with resources that can help students to concretize abstract concepts such as science or mathematics.

With this, and by considering PBL methodologies, all didactic units will be introduced with a challenge, which will be resolved during the different sessions, and using different external resources such as Christmas time or the first weeks of school to introduce them to STEAMland.

7.2.1.1. Unit 1. Once upon a time, in STEAMland….

Timing (September 5th to September 30th)
This didactic unit is the first one of the academic year, which means it would happen through all the adaptation time (first weeks of school). For this, it lasts four entire weeks, so all introduction and contextualization of the project can be properly done. Most of the unit will focus on autonomy and knowing each other,

as well as introducing experimental concepts and precedents, so students are correctly introduced to STEAMland.

Rationale:

In this unit, the focus should be introducing and engaging students to be part of STEAMland, which would be the name of the imaginary land created to hold all STEAM learnings and sessions. For this, in this unit students will get to know the characters that conform STEAMland and the different tasks needing to be solved. Also, specially the first two weeks, teachers should try to confirm all knowledges students already have, making sure all students are included and taken into account in terms of setting up the different levels of knowledge.

Previous knowledge:

- Simple conversational structures: “hello”, “goodbye”, “what is your name?”
- Simple words and structures to describe oneself: “I have __ brothers/sisters”, “I live in ___”
- **Basic reading and writing skills:**
  1) Ability to write all letters
  2) Ability to copy words, in English and Spanish
  3) Ability to read small texts in Spanish and understand the general idea
  4) Ability to read basic words in English and know its translation to Spanish

Unit learning outcomes	**Growth in harmony** Students will be able to: - Work cooperatively. - Raise hands for talking. **Discovery and representation of the environment** Students will be able to: - Structure STEAMland in the environment. - Locate themselves in the classroom space. - Identify and follow several steps to properly do an experiment. - Explore their surroundings with curiosity. - Formulate hypotheses about natural and chemical processes. **Communication and representation of reality** Students will be able to: - Describe themselves. - Work with others, respecting individual differences. - Narrate all the experiment’s processes with adequate language.

English and Spanish contents	
Contenidos en español	**Crecimiento en armonía** A. *El cuerpo y el control del mismo* - Imagen positiva de uno mismo. - El juego espontáneo y dirigido como actividad placentera y fuente de aprendizaje. B. *Desarrollo y emociones* - Valoración del trabajo bien hecho: Desarrollo inicial de hábitos y actitudes de esfuerzo, constancia y organización. C. *Hábitos de vida saludable para el cuidado de uno mismo y del entorno.* - Mantenimiento de limpieza y orden en el entorno. D. *Personas y emociones. La vida junto a los demás* - Habilidades sociales (pedir perdón, pedir permiso, dar las gracias, pedir por favor...) - Resolución de conflictos surgidos en interacciones con los otros. - Juego simbólico: Observación, imitación y representación de personas, personajes y situaciones **Descubrimiento y exploración del entorno** A. *El entorno. Exploración de objetos, materiales y espacios* - Empleo de unidades de medidas y del estándar para la exploración de las magnitudes de medida - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana B. *Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad*

	- Pautas para la investigación del entorno: interés, respeto, curiosidad, asombro, cuestionamiento y deseos de conocimiento - Estrategias y técnicas de investigación: ensayo-error, observación, experimentación, formulación y comprobación de hipótesis **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Comunicación interpersonal: empatía y asertividad - Convenciones sociales del intercambio lingüístico en situaciones comunicativas que potencien el respeto y la igualdad *B. Las lenguas y sus hablantes* - La realidad lingüística del entorno. Fórmulas o expresiones *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Intención comunicativa de los mensajes para evocar o relatar hechos, para explorar conocimientos, para expresar y comunicar ideas y sentimientos *E. Aproximación a la educación literaria* - Textos literarios infantiles orales y escritos (cuentos, historias, poesías…) adecuados al desarrollo infantiles *G. Lenguaje y expresion plásticos y visuales* - Materiales, elementos, técnicas y procedimientos plásticos como medio de comunicación y representación - Intención expresiva de producciones plásticas y pictóricas. *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños

	- Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The setting. Exploring objects, materials and spaces* - Description of objects: color (red, yellow, blue, green, pink, orange, purple, black, white), shape (round, square, sharp) and size (big, small) **Communication and representation of a reality** *J. Foreign Language* - Approaching to a foreign language: key words in order to initiate (hello, what's your name), maintain (and you?) and end (goodbye) a conversation - Active participation in oral interactions in routines - Acquisition of vocabulary related to experiments - Use of pre-established rules towards interacting with other to start, maintain and end a conversation
Target lexis in English	- Colors: red, yellow, blue, green, pink, orange, purple, black, white - Size of an object: big, small - Shape of an object: round, square, sharp - Conversational structures: hello, my name is…, what's your name? and you? goodbye - Experiment related vocabulary: experiment, hypotheses, materials, look, process, stage 1, 2…
Key competences	CP, CCL, CMCT, CPSA

7.2.1.2. Unit 2. Does water disappear in STEAMland?

Timing (October 3rd to October 21st)
The next didactic unit will be held during the first three weeks of October, since all learning processes should take more time as it is only the beginning of the

<table>
<tr><td colspan="2">academic year. Also, this unit will be taking longer than others because it would be the first time students will have to learn how to properly be part of an experiment, which parts are necessary, process language…</td></tr>
<tr><td colspan="2">Rationale:</td></tr>
<tr><td colspan="2">This unit should be focused on introducing students into science through challenges involved in the project. For this, all procedures linked to science experiments will be explained and given, including language in the process in an active way. In this unit, the story will focus on identifying each one of the four elements and words related to them. Also, the story will provide finding the water as a challenge, investigating its characteristics, including the water cycle.</td></tr>
<tr><td>Unit learning outcomes</td><td>Growth in harmony

Students will be able to

- Explore the surroundings moving their body through the space
- Work as a team to solve different experiments
- Name key elements of the experiments in English

Discovery and representation of the environment

Students will be able to

- Classify and compare several materials taking into account their specific characteristics
- Identify numbers in several situations
- Start using the number line as an essential tool
- Learn more about water and its cycle
- Name the elements of a plant

Communication and representation of reality

Students will be able to:

- Narrate a situation step by step
- Represent different situations in an artistic way by drawing, scrapbooking…</td></tr>
<tr><td colspan="2">English and Spanish contents</td></tr>
<tr><td>Contenidos en español</td><td>Crecimiento en armonía

A. El cuerpo y el control del mismo

- Identificación y respeto de las diferencias</td></tr>
</table>

	- Referencias espaciales en relación con el propio cuerpo (arriba-abajo, delante-detrás…) *B. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Rutinas: planificación de las acciones para resolver una tarea *C. Personas y emociones. La vida junto a los demás* - Habilidades sociales, afectivas y de convicencia - Juego simbólico. Observación, imitación y representación de personas, personajes y situaciones **Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de clasificación y comparación a través de la manipulación y experimentación - Función de los números en la vida cotidiana - Conteo, establecimiento de relaciones de comparación y transformación *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Procesos y resultados. Hallazgos, verificación y conclusiones *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Elementos naturales (agua): características y comportamiento - Clasificación de los seres vivos (semejanzas y diferencias) y materia inerte (sol, nubes, ríos…) **Comunicación y representación de la realidad** *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Verbalización de la secuencia de acciones en una acción planificada

	G. Lenguaje y expresión plásticos y visuales - Las técnicas básicas de la expresión plástica: dibujo, pintura, modelado, recortado, pegado…
Contents in English	**Growth in harmony** *A. The body and its control* - Spatial references concerning their own body (up-down, in front of…) *B. Healthy habits to take care of ourselves and the surroundings* - Routines: how to plan actions to solve a specific task **Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and spaces* - Classifying and comparing objects using manipulative skills *C. Investigating the natural environment. Environmental care.* - Natural elements: water. Characteristics **Communication and representation of reality** *G. Plastic arts' language and expression* - Basic plastic arts techniques: drawing, painting… J. Lengua extranjera - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Target lexis in English	- Four elements: Earth, Wind, Fire and Water

	- Words related to each element: burn, ice, dirt, flame, air… - Numbers in English up to 10 - Experiments' related words
Key competences	CP, CCL, CMCT, CPSA, CCR

7.2.1.3. Unit 3. STEAMland is in danger!

Timing (October 24th to November 11th)	
This didactic unit will be held for three weeks, including the last week of October and first two weeks of November. This specific unit includes several tasks that students will have to achieve in order to save STEAMland, including a specific task for Halloween (October 31st)	
Rationale:	
In this unit, we will have to solve different riddles and tasks in order to save STEAMland from the enemies. For this, students will have to apply their STEAM knowledges from the past two units into new situations, involving cognitive, motoric and musical scenarios. For this unit, the story will tell the story of STEAMland, how they were living peacefully until a great danger appear: global warming! There will be several riddles during the story for the students to solve them, introducing all unit.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Move their own body in a determined space, coordinating their movements. - Move through a space while playing or doing a determined activity - Choose an adequate position in order to complete a specific activity - Identify situations in which they do not want to participate and express it in a proper way **Discovery and representation of the environment** Students will be able to: - Move their body following directions provided by the teacher, either in English or Spanish - Use these notions in other type of activities - Guide others to complete determined tasks using specific movement notions

	Communication and representation of reality Students will be able to: - Use their oral language to interact with others and express their feelings and ideas - Identify different parts of a session, choosing movements in order to answer all demands - Reproduce a determined scenario or scene by collaborating with others
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - El movimiento: control del equilibrio, coordinación y desplazamientos - Habilidades motrices básicas de locomoción - Dominio activo del tono y la postura en función de la situación *B. Desarrollo y emociones* - Estrategias de ayuda y colaboración en contextos de juego y rutinas *C. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Identificación de situaciones peligrosas y prevención de accidentes **Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Nociones espaciales básicas en relación con el propio cuerpo, los objetos y las acciones, tanto en reposo como en movimiento: dentro-fuera, encima-debajo - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana

	Comunicación y representación de la realidad *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - El lenguaje oral en situaciones cotidianas: conversaciones, juegos de interacción social y expresión de vivencias *H. Lenguaje y expresión corporal* - Las posibilidades motrices del cuerpo con relación al espacio y al tiempo (actividad, movimiento, respiración, equilibrio y relajación) - Representación espontánea de personajes, hechos, situaciones e historias sencillas *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and spaces* - Key spatial elements related to our own body and actions: inside-outside, on-above **Communication and representation of reality** *C. Oral communication. Comprehension-expression-dialogue* - Oral communication in everyday situations: basic conversational structures *H. Language and corporal expression* - Spontaneous representation of specific characters, events, situations and simple stories in English

Target lexis in English	- Specific spatial elements related to our actions: inside-outside, on-above, right-left - Key oral communicative words: please, thank you, my name is…, I like/I don't like - ___is good, ____ is bad
Key competences	CP, CCL CMCT, CCR, CCU

7.2.1.4. Unit 4. Not all scientists wear capes

Timing (November 14th to December 2nd)	
This unit will be held for three weeks, including the last two weeks of November and the first days of December.	
Rationale:	
In this unit, students will learn about themselves as scientists and people. We will define what characteristics are the ones that define us the most, what we expect about others, what we like or dislike from people's behavior…. Also, we will resemble ourselves us STEAM superheroes, creating our own superhero power and disguise. In this unit's story, there will be several examples of "traditional superheroes" such as Spiderman, Batman… but also of important scientists along our history such as Einstein, Marie Curie…	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Identify and locate different parts of their body - Draw a human body and locate the main parts of the human body - Represent scenes and situations using symbolic games - Identify different textures and materials - Choose a material when described using their senses - Be part of any activity by having a specific role attending their own characteristics **Discovery and representation of the environment** Students will be able to: - Solve different tasks and riddles by thinking of creative solutions - Communicate with others to come up with creative solutions to a problem - Identify situations in which people have caused a negative effect on the natural environment

	Communication and representation of reality Students will be able to: - Identify and be aware of different non-verbal communicative gestures - Say and write different key words related to STEAMland, by using pictograms - Know how the classroom's library is structured - Communicate with others, tell a story or situation using pictograms - Represent situations using plastic arts
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Identificación y localización de partes externas e internas del cuerpo - Representación gráfica del esquema corporal - Juego simbólico - Juego sensorial *B. Desarrollo y emociones* - Estrategias para desarrollar la seguridad en sí mismo y el reconocimiento de posibilidades *D. Personas y emociones. La vida junto a los demás* - La respuesta a la diversidad debida a distintas formas de discapacidad y a sus implicaciones en la vida cotidiana **Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Estrategias para proponer soluciones: creatividad, diálogo, imaginación y descubrimiento

	C. Indagación en el medio físico y natural. Cuidado, valoración y respeto - Influencia de las acciones de las personas en el medio físico y en el patrimonio **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Elementos de comunicación no verbal (gestos, expresiones faciales, postura corporal…) *D. Aproximación al lenguaje escrito* - Identificación de palabras escritas muy significativas y usuales - Textos escritos en diferentes soportes: pictogramas *E. Aproximación a la educación literaria* - Utilización de la biblioteca como fuente de información, entretenimiento y disfrute *G. Lenguaje y expresión plásticos y visuales* - Manifestaciones plásticas variadas: representación de la figura humana diferenciando las distintas partes de su cuerpo - Las técnicas básicas de la espresión plástica: dibujo, pintura, modelado, recortado, pegado… *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *A. The body and its control*

	- Identification and location of specific external and internal parts of our body - Graphic representation of our body schema **Communication and representation of reality** *A. Communicative intention and interaction* - Key elements of non-verbal communication (gestures, facial expressions, body postures…) *D. Approaching to the written language* - Written language in different formats: pictograms
Target lexis in English	- Adjectives to describe themselves: smart, funny, happy, tall, short… - *I'm____* - External parts of the body: head, face, arm, shoulder, leg, knee, feet - Internal parts of the body: stomach, brain, lungs...
Key competences	CP, CCL, CMCT, CCU

7.2.1.5. Unit 5. Christmas at STEAMland!

Timing (December 9th to December 22nd)	
This unit will only last for two weeks, corresponding with the last two weeks of the semester (December), just before Christmas' holiday break	
Rationale:	
During these two weeks, we will bring Christmas to STEAMland by preparing our classroom with Christmas decorations and several activities in which STEAM learning and Christmas are interconnected. This unit will be the last one of the projects, so every contextualization needed to be known for further projects will be work on too. This unit's story will tell about how Christmas has arrived to STEAMland, and about the name and description of different Christmas' traditions all over the world.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Participate in all activities with adequate behavior, respecting others - Integrate autonomy, empathy and respect in every activity done in the classroom

	- Identify which are the main celebrations and events in our country **Discovery and representation of the environment** Students will be able to: - Solve tasks by talking and agreeing with others - Participate in all Christmas' activities **Communication and representation of reality** Students will be able to: - Identify key elements to start, sustain and end a conversation - Identify several sounds present in different resources such as poems or songs - Participate in the end-of-term representation, by singing, dancing or acting
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Autonomía en la realización de tareas y regulación del propio comportamiento - Hábitos elementales de organización, constancia e iniciativa en la propia actividad *D. Personas y emociones. La vida junto a los demás* - Estrategias de autorregulación de la conducta. Empatía y respeto tanto con las personas adultas como con los iguales - Celebraciones costumbres y tradiciones **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad*

	- Iniciativa en la búsqueda de acuerdos en la toma de decisiones. Actitud de escucha y colaboración *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Respeto por el patrimonio cultural presente en el medio físico - Interés por participar en actividades sociales y culturales **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Empleo de las formas socialmente establecidas para iniciar, mantener y terminar una conversación *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Discriminación auditiva y conciencia fonológica: identificación de sonidos y asociación fonema-grafema, a través de juegos rimas, poesías, canciones... *D. Aproximación al lenguaje escrito* - Otros códigos de representación gráfica: interpretación de fotografías y carteles - Comprensión de imágenes secuenciadas cronológicamente *E. Aproximación a la educación literaria* - Memorización y recitado de algunos textos literarios - Participación creativa en juegos lingüísticos y dramatización de textos literarios *F. Lenguaje y expresion musical* - Propuestas musicales en distintos formatos *H. Lenguaje y expresión corporal* - Interés e iniciatova en participar en danzas, juego simbólico y juegos de expresión corporal y dramática

	J. Lengua extranjera - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *D. People and emotions. Live within others* - Celebrations, traditions and habits **Communication and representation of reality** *A. Communicative intention and interaction* - Key elements to start, sustain and end a conversation - Discrimination and identification of specific phonological sounds through songs, poems… - Memorization of small phrases and texts in English - Translation of specific words using photographies or posters
Target lexis in English	- I like, I don't like - Christmas' traditions: Christmas tree, decorations, three wise men (parade), advent calendar, Santa Claus, Christmas' carol
Key competences	CP, CCL, CMCT, CCI, CCR, CCU

7.2.2. Second Project: Scientists around the world

In this second project, that will start after Christmas holidays, STEAMland will be expanded, discovering new places with the pretext of knowing how scientists have been present during all history. In this project, students will discover other nationalities and past times. By learning about other civilizations, we will learn how science has changed over the years, and what differences and similarities are in between different nationalities.

The first two didactic units are conformed for students to learn about prehistory, ancient history and two of the most important civilizations of all times: Rome and Egypt. The last three are about the different actual continents, so we can learn about the most remarkable scientists and STEAM specialists in different places of the world.

7.2.2.1. Unit 6. Next destination: the past of STEAMland!

Timing (January 9th to January 20th)	
The first unit of the project will last for the two first weeks of January (from the 9th to 20th).	
Rationale:	
In this unit, students will remember previous knowledges from the first project, and being introduced to the second project. In this unit, children will start to travel around time, being the first stop Prehistory and other past times when scientific evidence was. Also, students will start elaborating a timeline summarizing main aspects of each unit and historic period. In the story, there will be small timeline to show students about the main historic periods and the name of each one of them. Also, there will be examples of different inventions in each period, focused on the Prehistory.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Identify each historic period - Represent mini sketches about the Prehistory. - Identify different elements of the Prehistory. - Difference in between time periods using specific words for it. **Discovery and representation of the environment** Students will be able to: - Order and classify materials according to their characteristics - Identify the main elements of the Prehistory period **Communication and representation of reality** Students will be able to:

	- Verbalize a specific sequence of actions - Describe different materials using specific words
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Imagen global y segmentada del cuerpo: percepción de los cambios físicos propios y de su relación con el paso del tiempo - Referencias temporales: duración y orden - Rutinas asociadas al juego: guardar, clasificar... *B. Desarrollo y emociones* - Valoración del trabajo bien hecho: hábitos de trabajo, atención e iniciativa *C. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Necesidades básicas: identificación - Normas de comportamiento *D. Personas y emociones. La vida junto a los demás* - La actividad humana en el medio - Observación, imitación y representación de situaciones **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana - Indagación sobre el paso del tiempo (pasado, presente, futuro) - Aproximación a los principales hechos del pasado: prehistoria *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto*

	- Interés y conexión con la realidad próxima y lejana **Comunicación y representación de la realidad** *A. Interención e interacción comunicativa* - Convenciones sociales del intercambio lingüístico: escucha activa y turnos de diálogo *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Verbalización de la secuencia de acciones - Exposición clara y organizada de ideas *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *A. The body and its control* - Time references: before, after, long time ago… **Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and spaces* - Specific characteristics and attributes of several objects and materials: thickness, size and temperature - Approaching past events: Prehistory **Communication and representation of reality** *C. Oral verbal communication. Comprehension-expression-dialogue* - Verbalization of a sequence of actions

Target lexis in English	- Time references: before, after, ___ years ago… - Description of materials: size (big, small), thickness (thick, thin), temperature (hot, cold) - Ordinal number up to 15
Key competences	CP, CCL, CMCT, CPSA, CCU

7.2.2.2. Unit 7. Wait… there were scientists in Ancient Egypt?

Timing (January 23rd to February 10th)	
This unit will last for three weeks, from January 23th to February 10th	
Rationale:	
In this unit, students will learn more about the Egyptian civilization. Firstly, we will locate Egypt thanks to a map, elaborating a list with all previous knowledges' student have. Furthermore, they will discover which contemporary products have an origin in this civilization. For this unit, the story will show what is Egypt and where is located, providing with images about the Egyptian civilization: pyramids, dessert…	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Differentiate between activities and processes depending on temporal references - Know how to use several tools that measure time - Talk with others to resolve daily situations - Learn about the Egyptian civilization and inventions **Discovery and representation of the environment** Students will be able to: - Discriminate materials depending on their size, thickness, or temperature - Classify numbers attending to the number line - Differentiate cardinal and ordinal numbers - Build and verify hypotheses about how the behavior of different materials - Identify in which situations it is necessary to measure - Choose the adequate measurement process attending to the specific material's characteristics **Communication and representation of reality** Students will be able to:

	- Participate in discussions about literacy resources respecting active listening and dialogue shifts - Identify when the past tense is needed and use it in an adequate way - Identify when present tense is needed and use it in an adequate way - State basic hypotheses: I think… - Describe materials in relation to their size, shape, and temperature
	English and Spanish contents
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - El cuerpo y el entorno: referencias temporales (duración, orden, velocidad, ritmo…) *D. Personas y emociones. La vida junto a los demás* - Incorporación de pautas adecuadas para resolver conflictos cotidianos mediant el diálogo de forma autónoma - Asentamientos y actividades del entorno **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana - Cualidades o atributos de los objetos y materiales: grosor, tamaño, temperatura - Cualidades o atributos de los objetos y materiales: su comportamiento físico (caer, rodar, resbalar, botar, etc.) - Números cardinales y ordinales - Aproximación a la serie numérica: utilización oral para construir la serie numérica - Situaciones en que se hace necesario medir *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad*

	- Estrategias de planificación, organización o autorregulación de tareas **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Convenciones sociales del intercambio lingüístico en situaciones comunicativas: escucha activa y turnos de diálogo - Utilización de oraciones de distintos tiempos verbales (presente y pasado) *E. Aproximación a la educación literaria* - Conversaciones y diálogos en torno a textos literarios que fomenten la curiosidad y la imaginación *G. Lenguaje y expresión plásticos y visuales* - Otras manifestaciones artísticas: escultura y arquitectura *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and spaces* - Specific characteristics and attributes of several objects and materials: thickness, size and temperature - Ordinal and cardinal numbers - Situation in which is necessary to measure **Communication and representation of reality** *A. Communicative intention and interaction with others*

	- Social convention with a communicative exchange: active listening and dialog shifts - Basic structures to build present and past phrases
Target lexis in English	- Structure to state hypotheses: I think… - Description of materials: size (big, small), shape (round, square, sharp), temperature (hot, cold), color - Ordinal numbers up to 5 - Cardinal numbers up to 20
Key competences	CP, CCL, CMCT, CPSA, CCU

7.2.2.3. Unit 8. Work like an Egyptian

Timing (February 13th to March 3rd)	
This unit will begin from February 13th to March 3rd , to emphasize more in several countries of Europe	
Rationale:	
In this unit, we will learn more about how the Egyptian civilization was and what places composed an Egyptian city. Also, we will experiment with several objects and materials, all contextualized in the Egyptian civilization. In this unit's story, there will be shown different materials that Egyptians used to build or create new inventions. Also, there will be questions about if the children think different inventions were or were not created by the Egyptians.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Accept if they win or lose with an adequate behavior - Identify when others need of help from them - Participate in kinesthetic activities - Identify and learn from different jobs - Be aware of their immediate environment, being an active part of it **Discovery and representation of the environment** Students will be able to: - Learn more about the Egyptian civilization, specifically about their daily lives - Recreate several experiments and creating that have their origin in the Egyptian civilization **Communication and representation of reality**

	Students will be able to: - Discriminate several sounds and phonemes by hearing them - Identify how to use language depending on the setting and circumstances surrounding them - Acquire an adequate position while writing - Identify how to write in a paper (from left to right, starting at the upper level of the paper…) - Start writing short words with guided paper - Create plastic representation about the Egyptian civilization
	English and Spanish contents
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Aceptación e integración de las normas del juego. Saber ganar y perder. *B. Desarrollo y emociones* - Ofrecimiento y solicitud de ayuda para sí mismo y para los demás. - Valoración de la actitud de ayuda de otras personas. *C. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Actividad física estructurada con diferentes grados de intensidad. *D. Personas y emociones. La vida junto a los demás* - La amistad como elemento protector y de prevención a la violencia, promoviendo: el respeto a la vida y la dignidad - La actividad humana en el medio: oficios - El entorno próximo al alumnado: casa, barrio, ciudad… **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios*

	- Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana - Aproximación a los principales hechos del pasado: modos de vida en el pasado **Comunicación y representación de la realidad** *B. Las lenguas y sus hablantes* - Repertorio lingüístico: fonemas, palabras y construcciones - Registros y variedades lingüísticas *D. Aproximación al lenguaje escrito* - Funcionalidad y significatividad en situaciones comunicativas - Desarrollo perceptivo-motriz de la escritura: esquema corporal - El trazo: direccionalidad y orientación izquierda-derecha *G. Lenguaje y expresión plásticos y visuales* - Expresión de hechos y emociones a través de distintas manifestaciones artísticas *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *D. People and emotions. Our life with others* - Friendship as a key element for preventing violence, promoting respecting all type of diversities - Human activity in the world: jobs

	- Immediate environment to the student: their house, neighborhood, city… **Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and spaces* - Approaching to past livelihoods: Egyptian civilization
Target lexis in English	- Materials: rock, sand, metal wood - Jobs: constructor, teacher, firefighter, policeman, dancer… - Emotions: happy, sad, angry, bored…
Key competences	CP, CCL, CMCT, CPSA, CCR, CCU

7.2.2.4. Unit 9. Living the Roman Dream!

Timing (March 6th to March 17th)	
The last two units of this project will only last two weeks each. Specifically, Unit 9 will start on March 6th and end on March 17th.	
Rationale:	
Unit 9 will be focused in introducing the Roman civilization, by locating it in a map and, also, comparing it to Egypt. Also, we will learn about Italian experiments and creations. In this unit's story, we will introduce the children to the Roman civilization by creating a character: Italian STEAM. It will tell them the story of Rome, making emphasis in the inventions.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Identify and accept different basic emotions in them - Recognize in others different behaviors and emotions - Control their emotional reactions in different situations - Identify all family members and the relationship in between them - Difference in between actual and the Roman civilization's families and membership groups - Identify all key parts of an Ancient Roman city **Discovery and representation of the environment** Students will be able to:

	- Learn more about the Ancient Roman civilization, specifically about their internal organization **Communication and representation of reality** Students will be able to: - Build phrases in English and Spanish using key words about the Roman civilization - Investigate using different literacy resources - Talk with others to solve different tasks - Associate and difference in between sound and silence in several types of activities
	English and Spanish contents
Contenidos en español	**Crecer en armonía** *A. Desarrollo y emociones* - Herramientas para la gestion de las emociones: identificación, expresión y aceptación - Control de las propias emociones en distintas situaciones *D. Personas y emociones. La vida junto a los demás* - La familia - Principales características de la familia y de la escuela: miembros y relación entre ellos - Grupos de pertenencia: características, funciones y servicios **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana - Aproximación a los principales hechos del pasado: modos de vida del pasado **Comunicación y representación de la realidad** *B. Las lenguas y sus hablantes* - Repertorio lingüístico de cada alumno: fonemas, palabras y construcciones

	C. Comunicación verbal oral. Comprensión-expresión-diálogo - Uso progresivo del léxico: entonación, ritmo y tono - Pronunciación - Textos orales formales e informales *D. Aproximación al lenguaje escrito* - Intención comunicativa *E. Aproximación a la educación literaria* - Textos literarios infantiles orales y escritos (cuentos, historias, poesías…) *G. Lenguaje y expresión musical* - El sonido y el silencio: diferenciación entre ellos *F. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *D. People and emotions. Our life surrounded by others* - The family - Main characteristics about the family: members of a family and relationship in between them - Main characteristics of the school: relationship between students - Differences in between actual families and Roman families - Membership groups: characteristics and differences in between actual and Roman membership groups **Discovery and representation of the environment**

	A. The surroundings. Exploring objects, materials and spaces - Approaching to past livelihoods: Roman civilization **Communication and representation of reality** *F. Musical language and expression.* - Sound and silence: difference in between them *J. Approaching the foreign language* - Pronunciation of basic words in English - Writing of basic words in English
Target lexis in English	- Family: sister, brother, mother, father, grandfather, grandmother - In our family, we're __ people - I live with my___
Key competences	CP, CCL, CMCT, CPSA, CCU

7.2.2.5. Unit 10. Does pizza count as an experiment?

Timing (March 21st to March 30th)	
This unit will be the last one of the trimester, starting on March 21st and ending in March 30th , just before Easter's holiday	
Rationale:	
This unit will focus on doing experiments that had their origin in the Roman civilization. Also, it will be interconnected with the previous unit, but focusing on several creations and experiments that have their origin in the Ancient Rome civilization. Also, in this unit, students will focus on both civilizations, comparing them. For this unit, the story will compare what we have learn about the Egyptian civilization with Rome, making emphasis in their inventions.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Accept mistakes and be able to continue an activity **Discovery and representation of the environment** Students will be able to: - Identify which experiments or creations have an origin in the Ancient Rome civilization

	- Classify and compare materials for an experiment - Manipulate with different materials - Recognize numbers in their daily life - Use counting as a resource for experiments **Communication and representation of reality** Students will be able to: - Use oral language in daily situation, both in Spanish and English, to solve tasks and interact with others - Build short texts to communicate different scenes - Identify and difference in between different sounds - Memorize short phrases and texts and recite them - Investigate about the Ancient Rome history
	English and Spanish contents
Contenidos en español	**Crecer en armonía** *B. Desarrollo y emociones* - Aceptación de errores y correcciones: manifestación de superación y logro - La familia y la incorporación a la escuela **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación, clasificación y comparación a través de manipulación y experimentación - Funcionalidad de los números en la vida cotidiana - Conteo: establecimiento de relaciones de comparación y transformación (repartir, cambiar) *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Relaciones con personas adultas, con iguales y con el entorno **Comunicación y representación de la realidad**

	C. Comunicación verbal oral. Comprensión-expresión-diálogo - El lenguaje oral en situaciones cotidianas: conversaciones, juegos de interacción social y expresión de vivencias - Verbalización de la secuencia de acciones planificadas - Exposición clara y organizada de ideas - Identificación de sonidos - Asociación grafema-fonema - Análisis silábico y fonético - Memoria auditiva *D. Aproximación al lenguaje escrito* - Iniciación a estrategias de búsqueda de información y comunicación *F. Lenguaje y expresión musical* - Audición atenta, interés y participación en obras musicales presentes en el entorno *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials, and spaces* - Order, classification, and comparison relations in between materials by using manipulative techniques and activities - Counting: distribute and change **Communication and representation of reality** *C. Oral communication. Comprehension-expression-dialogue*

	- Sound identification - Grapheme-phoneme association - Auditive memory *D. Approaching written language* - Basic vocabulary related to experiments
Target lexis in English	- Ordinal numbers up to 10 - Classification categories: size, shape, temperature - Experiment's vocabulary: create, experiment, observe…
Key competences	CP, CCL, CMCT, CPSA, CCU

7.2.3. Third Project: STEAMland…goes viral!

This last project will be contextualized as a recapitulation of all previous learnings done during the school year and reflected in STEAMland. By the context of virializing STEAMland, this project will be focused on learning how to communicate in different ways all learnings, by aiming to explain STEAMland on a blog students will be creating in every unit. In this website, parents would have access to all videos and photos done in the process. All units are interconnected by dividing different ways of communicating, being the main goal to learn language through language.

7.2.3.1. Unit 11. Breaking news: STEAMland is awesome!

Timing (April 11th to April 21st)
This unit will be the first one of the third and last semester of the academic year, starting right after the holidays (April 11th) up to April 21st, lasting two entire weeks
Rationale:
This project aims to provide students with tools and knowledge for being able to express their own learnings and experiences. Firstly, the entire class will do a recapitulation of all elements and experiences of STEAMland. After this, children will learn how to expand their knowledge to others, by creating a news broadcast. The story, this time, will introduce them into the news broadcast structure, by introducing them the challenge of creating one of their own.

Unit learning outcomes	**Growth in harmony** Students will be able to: - Recapitulate most learning done in both two past projects - Imitate and represent different experiments and situations as they are being filmed - Structure an experiment with other students - Learn how a news broadcast is - Distribute all roles needed for a news broadcast for all students **Discovery and representation of the environment** Students will be able to: - Position themselves and all materials needed in the news broadcast **Communication and representation of reality** Students will be able to: - Use all language and communicate elements needed for the news broadcast - Respect dialogue shifts - Combine verbal and non-verbal language - Adapt their voice and body to the circumstances surrounding them
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Hábitos elementales de organización: iniciativa, autonomía y esfuerzo *B. Desarrollo y emociones* - Aceptación de correcciones para mejorar sus acciones *D. Personas y emociones. La vida junto a los demás.* - Fórmulas de cortesía y relación social e interacción social positiva (respeto a las personas mayores, a los padres, a los niños) - Juego simbólico. Observación, imitación y representación de personas, personajes y situaciones

	Descubrimiento y representación del entorno *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Funcionalidad de los números en la vida cotidiana - Nociones espaciales básicas en relación con el propio cuerpo: cerca-lejos, juntos-separados, de frente-de lado- de espaldas, izquierda-derecha…) **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Repertorio comunicativo y elementos de comunicación no verbal (gestos, expresiones faciales…) *B. Las lenguas y sus hablantes* - Conjunto de elementos lingüísticos de cada alumno: fonemas, palabras, construcciones, registros y variedades lingüísticas *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Textos orales formales e informales - Intención comunicativa de los mensajes de evocar y relatar hechos, para expresar y comunicar ideas y sentimientos *F. Lenguaje y expresión musical* - Posibilidades sonoras, expresivas y creativas de la voz, el cuerpo y los instrumentos musicales *G. Lenguaje y expresión plásticos y visuales* - Las técnicas básicas de la expresión plástica: dibujo, pintura, modelado, recortado, pegado *H. Lenguaje y expresión corporal*

	- Posibilidades expresivas y comunicativas del propio cuerpo en actividades individuales y grupales con referentes de igualdad - Descubrimiento y experimentación de gestos y movimientos *I. Alfabetización digital* - Función educativa de los dispositivos y elementos tecnológicos J. Lengua extranjera - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *D. People and emotions. Life surrounded by others.* - Symbolic games: observation, imitation and representation of people, situations and moments **Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials, and spaces* - Spatial notions within their own movements: near-far, together-separated, front-back, left-right… **Communication and representation of reality** *F. Musical language and expression* - Musical, expressive and creative possibilities of our voice, body - Musical instruments *H. Kinesthetic language and expression*

	- Gestures and movements discovery and experimentation
Target lexis in English	- Name of the experiments - Spatial notions: near-far, together-separated, front-back, left-right - Basic conversational structures: hello, goodbye, next - Name of the different materials needed in an experiment
Key competences	CP, CCL, CMCT, CD, CPSA

7.2.3.2. Unit 12. STEAMland is available to be downloaded

Timing (April 24th to May 12th)	
Unit 12 will last three weeks in between April and May, starting on April 24th and ending on May 12th	
Rationale:	
In this unit, students will start to compile all learning done in the year, by finishing up the news broadcast from last unit and identifying how to structure it, so it can be uploaded to the blog.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Distinguish which human actions are good and bad for the environment - Acquire good habits in order to preserve the environment - Talk about global warming and environmental actions - Identify their emotions towards real situations - Collaborate with others to sum up their experiences **Discovery and representation of the environment** Students will be able to: - Create a newspaper section by adding or subtracting sections or activities - Count - Difference in between which resources have vegetal or animal origin **Communication and representation of reality** Students will be able to: - Use technology in a useful way to upload the newspaper to the private blog, so it can be accessible for parents

English and Spanish contents	
Contenidos en español	**Crecer en armonía** *C. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Hábitos y practicas responsables con el medio ambiente, con la alimentación, la higiene y el descanso *D. Personas y emociones. La vida junto a los demás* - Habilidades sociales, comunicación de sentimientos - Emociones y pautas básicas de convivencia **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Funcionalidad de los números en la vida cotidiana - Conteo - Establecimiento de relaciones de comparación y transformación (añadir, quitar, repartir y cambiar) por medio de la manipulación de objetos aplicada a la vida cotidiana *C. Indagación en el medio fisico y natural. Cuidado, valoración y respeto* - Fenómenos naturales: identificación y repercursión en la vida de las personas, así como sus causas y consecuencias - Obtención de recursos procedentes de los seres vivos **Comunicación y representación de la realidad** *I. Alfabetización digital* - Aplicaciones y herramientas con distintos fines: creación, comunicación, aprendizaje, disfrute y búsqueda de información - Uso responsable de las tecnologías - Distinción entre la realidad y la representación audivisual

	J. Lengua extranjera - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials, and spaces* - Counting process - Comparing and transforming relations in between objects (adding, subtracting, distributing and changing) *C. Physical and natural surroundings' inquiry. Respecting and valuating the ecosystem.* - Obtainment of resources from living beings **Communication and representation of reality** *I. Digital literacy* - Use of specific application and digital tools to create and communicate
Target lexis in English	- Name of the experiments - Spatial notions: near-far, together-separated, front-back, left-right - Basic conversational structures: hello, goodbye, next - Name of the different materials needed in an experiment
Key competences	CP, CCL, CMCT, CD, CPSA

7.2.3.3. Unit 13. Choreographing experiments

Timing (May 15th to May 26th)
This unit will last two weeks, starting on May 15th and ending on May 26th
Rationale:
In this unit, students will remember which experiments we have done over the academic year, recording them, and uploading them to the blog, so that parents

can see the videos. This unit's story will help the students to remember all experiments done in the past year, by recapitulating each unit with the most meaningful learning experiences.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Identify internal and external body parts - Know how to move their body depending on the space available and the movement chosen - Select the right movement depending on the task - Collaborate with others in kinesthetic activities, respecting individual differences - Look and imitate an experiment **Discovery and representation of the environment** Students will be able to: - Narrate what is happening in an experiment - Identify which steps are necessary in a specific experiment - Express the experiment's conclusions, both in Spanish and in English **Communication and representation of reality** Students will be able to: - Participate in the experiment's choreography with others - Select proper movements and gestures for the experiment - Represent an experiment in an artistic way
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Imagen global y segmentada del cuerpo: características individuales - Identificación y localización de partes externas e internas del cuerpo - El cuerpo y el entorno: referencias espaciales en relación con el propio cuerpo - El movimiento: control de tono, equilibrio y desplazamientos

	- Habilidades motrices de locomoción: saltos y giros en diferentes ejes *D. Personas y emociones. La vida junto a los demás* - Juego simbólico - Observación, imitación y representación de situaciones **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Funcionalidad de los números en la vida cotidiana - Relaciones de orden, clasificación y comparación gracias a la manipulación, observación y experimentación - Cuantificadores básicos: igual que, más que, menos que… - Situaciones en las que se hace necesario medir *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Técnicas de investigación: observación, experimentación y formulación de hipótesis - Estrategias para proponer soluciones: diálogo, imaginación y descubrimiento - Procesos y resultados. Conclusiones. **Comunicación y representación de la realidad** *F. Lenguaje y expresión musical* - Intención expresiva en las producciones musicales - Participación en obras musicales presentes en el entorno: danzas sencillas y bailes *H. Lenguaje y expresión corporal* - Posibilidades expresivas y comunicativas del propio cuerpo - Descubrimiento y experimentación de gestos y movimientos - Posibilidades motrices del cuerpo en lo relativa al espacio

	- Nociones de direccionalidad del cuerpo - Representación de hechos, situaciones e historias sencillas *I. Alfabetización digital* - Función educativa de los dispositivos y elementos tecnológicos *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Growth in harmony** *A. The body and our control towards it* - Global and segmented vision of our body: individual characteristics - Identification and location of several internal and external body parts **Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and places* - Order, classifying and comparing processes manipulating objects - Basic quantifiers: the same as, more than, less than… *B. Experimenting in our surroundings. Curiosity, creative thinking and creativity* - Processes and results. Conclusions.
Target lexis in English	- Name of the experiments - Spatial notions: near-far, together-separated, front-back, left-right - Basic conversational structures: hello, goodbye, next - Name of the different materials needed in an experiment

	- Stages of an experiment: think, write, experiment and observe
Key competences	CP, CCL, CMCT, CD, CPSA, CCR

7.2.3.4. Unit 14. Telling our STEAMstory to the world!

Timing (May 29th to June 9th)	
This unit will start on May 29th and end on June 9th, lasting two weeks	
Rationale:	
In this unit, students will start preparing all the story of STEAMland, by recapitulating what they have learn and, preparing a little story with some characters, that will be interpretated by some of the students, the surroundings, some of the experiments…. In this unit, students will rehearse and interpretate the story of STEAMland.	
Unit learning outcomes	**Growth in harmony** Students will be able to: - Accept their own personal characteristics - Accept others personal characteristics - Identify and narrate significant situations during the school year - Help others when needed **Discovery and representation of the environment** Students will be able to: - Start sequencing most activities done during the year in a timeline - Create a physical timeline in which to ubicate all events - Investigate about certain topics - Collaborate with others to synthetize all learnings done in the academic year **Communication and representation of reality** Students will be able to: - Talk with others about mutual shared experiences - Create written words or messages to reflect their learnings - Sequence all actions in a timeline

	- Use the classroom's library as a known resource to investigate and recapitulate all learnings
English and Spanish contents	
Contenidos en español	**Crecer en armonía** *A. El cuerpo y el control del mismo* - Imagen positiva de uno mismo - Aceptación de las posibilidades y limitaciones propias - Identificación y respeto de las diferencias - Autonomía en la realización de tareas y regulación del propio movimiento *B. Desarrollo y emociones* - Identificación y expresión de vivencias, preferencias e intereses - Valoración de actitud de ayuda de otras personas - Estrategias para el reconocimiento de posibilidades - Valoración del trabajo bien hecho: aceptación de correcciones **Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Funcionalidad de los números en la vida cotidiana - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación - Aproximación a la serie numérica: representación gráfica y oral - Hechos del pasado *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Investigación en el entorno: interés, respeto y curiosidad - Relaciones y conexiones entre lo conocido y lo novedoso - Relaciones entre experiencias previas y nuevas

	- Actitud de escucha y colaboración **Comunicación y representación de la realidad** *A. Intención e interacción comunicativa* - Repertorio comunicativo y elementos de comunicación no verbal - Convenciones sociales del intercambio lingüístico *B. Las lenguas y sus hablantes* - La realidad lingüística del entorno: formulas y expresiones *C. Comunicación verbal oral. Comprensión-expresión-diálogo.* - Intención comunicativa de los mensajes para evocar y relatar hechos - Intención comunicativa para expresar y comunicar ideas *D. Aproximación al lenguaje escrito* - Comprensión de imágenes secuenciadas cronológicamente *E. Aproximación a la educación literaria* - Textos literarios infantiles orales y escritos - Participación creativa en juegos lingüísticos - Utilización de la biblioteca como fuente de información, entretenimiento y disfrute *G. Lenguaje y expresión plásticos y visuales* - Intención expresiva de producciones plásticas y pictóricas *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico

	- Normas para iniciar, mantener y terminar una conversación
Contents in English	**Discovery and representation of the environment** *A. The surroundings. Exploring objects, materials and places* - Function of numbers in our daily lives - Approaching the number line: graphic and oral representation - Past events *B. Experimenting in our surroundings. Curiosity, critic thinking and creativity* - Interconnecting past and current events **Communication and representation of reality** *A. Communicative intention and interaction* - Communicative repertoire and non-verbal elements
Target lexis in English	All target lexis of the syllabus
Key competences	CP, CCL, CMCT, CD, CPSA, CCR

7.2.3.5. Unit 15. #STEAMland

Timing (June 12th to June 22nd)	
This unit will begin on June 12th and end on June 22nd , being the last unit of the academic year	
Rationale:	
In this unit, students will continue to rehearse the story of STEAMland, and elaborate a mural containing all key elements of STEAMland. The aim of this unit is to recapitulate all learning processes. By being the last unit of the year, students will prepare themselves to perform in front of their parents and other teachers the story of STEAMland, which could be recorded, if necessary, and uploaded to the blog. By the end of this unit, the teacher will read the last story, which will be a recapitulation of all happened during the project, giving STEAMland a closure.	
Unit learning outcomes	**Communication and representation of reality** Students will be able to:

	- Express their process through STEAMland in a structured way - Know several lexical and grammatical structures - Pronounce clearly - Communicate their ideas in a clear and simple way - Identify pictures and images as part of STEAMland - Use technology in a safe way, by discriminating which application would be needed for this final task
Contenidos en español	**Descubrimiento y representación del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Funcionalidad de los números en la vida cotidiana - Relaciones de orden, seriación y clasificación a través de la manipulación, observación y experimentación **Comunicación y representación de la realidad** *C. Comunicación verbal oral. Comprensión-expresión-diálogo.* - Uso del léxico y estructuración gramatical - Uso de la entonación, ritmo y tono adecuado - Pronunciación clara - Verbalización de la secuencia de acciones en una acción planificada - Exposición clara y organizada de las ideas *D. Aproximación al lenguaje escrito* - Intención comunicativa en lo referido al lenguaje escrito - Otros códigos de representación gráfica, tales como imágenes, símbolos, números, fotografías… *E. Aproximación a la educación literaria* - Memorización y recitado de textos - Dramatización de los textos literarios para divertirse y aprender

	F. Lenguaje y expresión musical - Posibilidades sonoras, expresivas y creativas de la voz - Posibilidades sonoras, expresivas y creativas del cuerpo *I. Alfabetización digital* - Aplicaciones y herramientas con distintos fines: creación y comunicación - Uso responsible de las tecnologías *J. Lengua extranjera* - Elementos para una comunicación funcional básica - Comprensión de la idea global de textos pequeños - Expresión oral en lengua extranjera: adquisición de vocabulario básico - Normas para iniciar, mantener y terminar una conversación
Contents in English	**Communication and representation of reality** *C. Oral communication. Comprehension-expression-dialogue* - Use of specific lexis and grammatical structure - Clear pronunciation - Organized idea exposition *E. Approaching literary education* - Memorization and recitation of specific texts - Text dramatization
Target lexis in English	All target lexis of the syllabus
Key competences	CP, CCL, CMCT, CD, CPSA, CCR

8. Methodology

8.1. Methodological Theory

The aim of the present annual syllabus is to enhance STEAM in Early Childhood Education. As for this, this topic will be facilitated, mostly, using Project-Based Learning, which is a methodology that provides meaningful and contextualized learning, increased inner motivation and interconnected learning experiences. PBL can be defined as a way to build bridges or connections in between previous and new knowledge and skills, not forgetting meaningful values and attitudes underlying our teaching practice (Lam, Cheng & Choy, 2010). It provides a wide variety of learning experiences, not independent but interconnected, that allows students to build their own learning. Also, by adding storytelling methodology, all the learning processes are interconnected. By this, storytelling provides an exceptional context in which students can learn language through language, by enhancing creativity and motivation. With the storytelling methodology, students are the main character of the language learning story, having to deal with all challenges provided with PBL using their imagination and creative thinking (Phillips, 2000)

Hereunder, each methodology will be described in detail, specifying why it has been chosen to conform the present syllabus, to demonstrate how all of them enriches the syllabus and fit all together.

8.1.1. Project-Based Learning

Ravitz (2010) defined PBL as a methodology that should include in-depth inquiry toward a subject of study during an extended period, sequencing moments in which the students should have to plan their own leaning path towards achieving a common goal. With all the problem-solving procedures involved in the learning process, the students will learn, based on their own experiences, how to solve a challenge when presented in their daily life, giving response to any task in their future jobs (DeFillipi, 2001). Also, PBL provides students with a flexible mindset, which can be defined as the possibility of varying their response or actions according to the situation in which they are involved,

giving them the possibility of changing their mindset if wanted (Koutrouba & Karageorgou, 2013).

Argumentation and negotiation skills are essential in the correct implementation of PBL, as a way of involving others and sharing ideas to achieve a common goal. Also, they allow to transfer new learning concepts to all members of the group (Koutrouba & Karageorgou, 2013), so every student participates actively in the learning outcome. Other skills present in PBL are persistence, decisiveness and determination (Koutrouba & Karageorgou, 2013), that could be explained by the ability of choosing correct choices that will lead to correct end results. If not, students will have to learn how to react properly to certain situations in which they cannot control the consequences and redirect their decisions towards an optimal end goal.

This methodology enhances the context as the main part of the learning process, where learners acquire the main role in their learning process (Cocco, 2006). A collaborative environment is vital to achieve the aim of this methodology: achieve as a group a shared goal established by the teacher (Kokotsaki, Menzies & Wiggins, 2016). PBL allows students to organize their actions toward acquiring needed knowledge for a real purpose, giving real significance to the learning process and actions. This final product can be defined as a concrete artefact (Helle et.al., 2006), that concretizes all the concepts learnt in the process, representing “new understandings, knowledge and attitudes regarding the issue under investigation” (Kokotsaki, Menzies, & Wiggins, 2016; p.246)

PBL allows Early Childhood students to expand their knowledge in contextualized and defined settings, learning under controlled surroundings by investigating different topics. Therefore, studies have shown that all students are benefited in these experiences, not matter their academic background or personal skills (Kokotsaki, Menzies, & Wiggins, 2016). One of the reasons for this is the wide variety of skills needed in PBL. Not only individual skills will be developed, but so will strategies that allows children to share their experiences in order to pool shared experiences and knowledges (Lam, Cheng & Choy, 2010).

In addition, group heterogeneity is vital for a successful PBL work because students can rely on others, not necessarily of the same academic profile. Students identified of a low level of achievement could get assistance while investigating and managing the challenge proposed, as high achievers could develop other ways of learning such as improving cross knowledges and skills needed when explaining concepts or questions to others (Cheng, Lam & Chan, 2008). The efficacy of PBL is explained by the professionals involved in the learning process, being the schools with a more supportive teacher competence and autonomy the ones that present more motivation towards PBL (Lam, Cheng & Choy, 2010). Teacher's self-efficacy also guarantees PBL success because it reflects the school support given to them in their own teaching practicum.

Also, it should be considered how teacher autonomy can reflect in their own inner motivation in the implementation of PBL (Lam, Cheng & Choy, 2010), because "*teachers may lose the joy in their occupation if too much regimentation and external interference complicate their pedagogic objectives and self-determined professional goals"* (Lam, Cheng and Choy, 2010; p.489). For this, it is important to pay attention to not only the actual teaching performance but the conditions and background that surrounds our practicum. As for this, PBL allows an exponential increase of self-knowledge, self-regulation and self-confidence (Koutrouba & Karageorgou, 2013), that affects students not only in the school setting but wherever they go.

8.1.2. STEAM Education

ECE necessarily develops hard and soft skills such as critical thinking, creativity, and cooperation. For this reason, STEAM education is one of the main focuses in the present syllabus because it provides with the same skills, by introducing investigation and cooperation as two main pillars to develop their creativity and imagination (Wahyuningsih et al., 2020). Gonzales and Kuenzi (2012) defined STEAM education as integrating science, technology, engineering, art and mathematics integrated so the students can actively build their knowledge based on their own experiences and investigations. STEAM education emerged in 1990 by National Science Foundation due to the lack of

this type of curriculum in Early Childhood and Primary Education to provide students with several options in order to solve their problems by integrating several disciplines including science, technology, engineering, art and mathematics (Akturk & Demircan, 2017). By this, thanks to STEAM education both practice and theory are interconnected, preparing for more innovative, creative and critical thinking cooperation (Bertrand & Namukasa, 2020).

Nevertheless, multiple studies have shown the lack of presence of STEAM Education in ECE (Andersson & Gillabert, 2014), not matter that these types of topics generate inner curiosity, excitement, and willingness to learn (Krogh & Slentz, 2010). These types of abilities correlate perfectly with the PBL and storytelling methodology, linked also to further progress and success in further academical years (Wahyuningsih et al., 2020). In ECE, children have high motivation towards exploring and questioning every aspect surrounding them, building their knowledge step by step from their own personal decisions.

Also, STEAM education prepares student for future professional paths and interests that cannot be included with the exact precision in the subjects offered in the school. Studies have shown that in a ten-year window, most STEAM related professions are going to experience an exponential increment, demanding more and more skills related to this ambit (Chubb, 2013). ECE provides an excellent context in which barriers in between subjects are not defined, which means transversal concepts are more easily included than in other educational stages. STEAM education provides an excellent opportunity to embody this multidisciplinary view of the education in a more integrated way (Campbell, Speldewinde, Howitt & Macdonald, 2018), giving the opportunity to teach in a more appealing surrounding.

STEAM education gives the opportunity to scaffold student's learning towards an ultimate challenge, proving them with support if needed but retiring when doing cooperative or individual work. Also, by being there for our students, teachers can introduce when needed more items that activate inner interests in our students, prior selecting them with an educational purpose towards PBL purpose. As for this, *"educational acknowledge that they use approaches such as inquiry,*

concept development, appropriate language development, child-instigated and are able to define what these mean" (p.24; Campbell, Speldewinde, Howitt & Macdonald, 2018)

PBL is, basically, an investigative way of learning, which relates perfectly with STEAM methodology. As general basis of PBL, the students will have to research on a particular topic and come up with a collective outcome that answers the main question or task. Cheng, Lam and Chan (2008) conform PBL as a necessary group methodology, in which the group formation is essential in order to provide with a more meaningful way. As for this, it is necessary to form small groups in which students can express themselves in a safe space, sharing and cooperating in order to achieve common goals. The aim of including group work is beyond this, because of the multidisciplinary of STEAM, it is important to include a way of working in which topics can be easily linked in an interdisciplinary way.

8.1.3. Storytelling

Furthermore, storytelling methodology enhances previous learning, providing an excellent contextualization in which to set up our learning practicum. All stories include not only the plot or characters, but a wide selection of language, grammar, vocabulary, among others. The aim of including storytelling in the present syllabus is to focus on language by an interactive resource such a story, which interconnects STEAM education and language. Storytelling provides a shared narrative between teachers and students (Schick & Melzi, 2010), where stories include all contents related to language learning in a contextualized and pedagogical way. Also, storytelling helps students to create imaginary and abstract world and scenario, where scientific learning can be introduced and hold.

In schools nowadays, there is little attention paid to teaching STEAM in the ECE setting (Kermani & Aldemir, 2018), which is why this syllabus provides with STEAM learning through PBL and Storytelling methodology. The three methodologies selected can be used together to provide a much more meaningful learning experience, by dividing the academic year into three projects related to

STEAM, all of them introduced with a story that provides contextualization to children.

To sum up, by introducing storytelling, all items provided by PBL could be integrated in the learning process in a didactic way, so students feel they belong inside the story, contextualized by each project and, specifically, each unit. Also, STEAM can be perceived as an abstract ensemble of concepts, which can be an obstacle in ECE. Thanks to the storytelling methodology, not only children will understand all concepts with this story, but will have the chance to experiment with them, which will provide meaning to them.

8.2. Resources

8.2.1. Material Resources

For the success of this syllabus, it is important to take into account all different materials needed for the consecution of the activities. All materials will be available for students anytime during the academic year, including those which are expendable, those would need to be refilled, and others that will stay in the classroom anytime for the students to use them. Most materials will be elaborated by the teacher, in order to provide specific and personalized materials for our projects. Others will also be recycled, so it can be used for several uses, such as specific materials needed for experiments.

For the stationery, it will be needed several types of paper, such as cardboard, colored paper… for different creations. Also, we will need glue sticks, silicon sticks and white glue, to incorporate other materials into murals and other creations. Also, we will include basic stationery for everyday se such as pencils, crayons, markers, paintbrushes, tempera… all organized in several compartments right next to *Our Office* space. Also, other utensils such as erasers and pencil sharpeners (adequate for ECE) will be provided, as well as adapted scissors. For their creations, materials such as pipe cleaners, stickers, feathers and others will be also available in our classroom.

As for ICT materials, the class will have a paneled Smartboard, right next to *Our Office* space, which could be used every day for audiovisual materials such as movies, songs, videos.... Also, for certain activities, the students will have iPad's, rented by the school and shared by all classes of ECE.

For class furniture, all corners need different types of elements. For *Our Office* corner, chairs and tables adapted for 5-year-old students will be needed. These chairs and tables will be of four different colors (green, pink, blue and yellow). Also, in this space, there will be a blackboard and a smartboard, so it can be use while working. The *assembly* space will be determined by another blackboard, which will be in the opposite side of the classroom, and a determined rug. Also,

in this classroom, all floors will be covered by a moquette, so it's more comfortable for children.

For the *Craft Barn Area*, there will be different type of organizational furniture, accessible for children, and others that will be placed in an upper level with delicate and determined materials. Also, in the *Take a breath and relax corner*, there will be a tipi tent, some pillows and blankets, and determined teddies, so students find this space as welcoming and relaxing.

All STEAM materials will be gathered in the *Experimenting with STEAM* corner, where there will be different-sized containers, specific materials for each experiment, a pre-determined corner for observation… Also, this space will have a microscope and other specific materials related to experiments, all gathered in a big low table so students can sit around. Also, in this corner there will be other materials used in symbolic games, such as construction blocks, Cuisenaire roads…

Another specific space that needs of specific materials will be the *Once Upon a Time* corner, where there will be another specific rug and pillows, reserved for storytelling moments. Also, in this space there will be several libraries with stories, some of them created specifically for all three projects and other storybooks related to STEAM.

Other materials needed for this classroom will be other libraries and cabinets for specific materials for the teacher, boardgames, toys…. As well as hangers for student's coats and personal belongings. Finally, decorations for the classroom will also be needed in order to decorate the learning environment.

8.2.2. Human Resources

In our classroom, it is important to be aware of all human resources available, so the activities can be diversified, but coordinated by the same person, aiming to achieve all objectives, and learning outcomes.

- **TUTOR/ENGLISH TEACHER:** This person will be the coordinator for the whole academic year. In Kite School, all tutors are the English teacher for that class, which facilitates how English learning is integrated through the day. All coordination from the project will come from this figure, also including taking into account the rest of academic hours in Spanish.

- **Language assistant:** there are a total of 7 native language assistant that rotate in between all ECE classes, supporting the tutor. Most of the time they oversee several parts of the lesson, including those that require a more active communicative effort from the students. Language assistants are an essential part of ECE classes because they bring not only their expertise in English but their culture, providing children with a diverse contextualization of cultures and traditions.

- **Support teachers:** all these teachers are scheduled to be certain timeframes in our schedule in order to provide support to ACNEE and ACNEAE children in our classrooms. The help provided can be used in activities that require more interconnection in between languages or subjects and should be taken into account while programing.

- **Specialist in Therapeutical Pedagogy (PT):** this person will coordinate with the tutor and support teacher all changes or adaptations require for the ACNEE and ACNEAE students. Also, he/she will come in specific timeframes so students with special needs are verified to be learning and to have available all materials needed for their adaptations.

8.2.3. Classroom arrangement (see annex 1)

The classroom will be the space most used in our syllabus, so a lot of effort should be made to make it appealing and safe for them. The classroom will be arranged in order to provide our students with autonomy and possibility of decision, by creating different corners with materials. The corners are the following:

⇒ **Craft Barn:** in this corner, there will be stationery such as cardboard paper, markers, watercolors, paintbrushes… as well as different images of famous paintings and references to remarked painters and creations. This corner will have a table for six students and will have a mural where students can expose their creation. This corner has been created in order to enhance STEAM learning through art, as a way to express their learning in specific materials and creations. By providing students with opportunities of creating something new, creativity and imagination are being potentiated.

⇒ **Our office**: this corner will have all tables and chairs needed for every student, it would be the place where all activities that include graphomotor control, fine motricity and writing will be held. This space will be used almost every day, as a way to connect theory and practice.

⇒ **Once Upon a Time corner:** this corner will be set up in order to be comfortable and appealing to all students, with a three-self library with stories for different levels. Also, on the floor there would be a carpet and some pillows, so students can sit on the floor and enjoy their reading time. It will be in this corner where all conversations before the learning process will be asked. Also, this corner can be used anytime during all sessions to enhance silent and reflective periods of time.

⇒ **Experimenting with STEAM:** in this area, it would be established the context for our projects, being the place where students would start and end every didactic unit, as well as participating in some experiments that do not need to be done in the laboratory. Also, this area will have several materials related to symbolic games related to STEAM, as a way to imagine and create from scratch their own games.

⇒ **Assembly space:** this space will be set up next to the blackboard or smartboard, it would be the place from where the children will start their days. This space will be also next to the *experimenting with STEAM* corner so it can be used when waiting for other students to finish up their activities.

⇒ **Take a breath and relax corner:** this corner will be used as a tool for all students, as a way to respond to current diversity. In this area, there will

be a comfort space with a tent, pillows and blankets, where children could go when feeling overwhelmed, scared or anxious.

8.2.4. Time Resources

In ECE, all classes start at 9am and end at 4pm. For the distribution of the different subjects, since Kite School is bilingual, the timetable would be divided half in English and half in Spanish (see annex 3.17.)

8.2.5. Spatial Resources

For our annual syllabus, the spaces will be varied in order to achieve different goals according to the activities and unit specific objectives. According to this, the spaces predetermined to be used will be the following:

⇒ **Classroom:** it will be the main space used in this annual syllabus because of the possibilities of personalization and customization. All activities and dynamics will start in this space, including daily routines and debrief after most activities. Also, by arranging the class as shown in the classroom arrangement section above, there will be different learning areas to be used in different dynamics. Furthermore, all individual work that needs to be done.

⇒ **Recess area:** this area will be used in those activities that require more space, specifically psychomotricity activities and sessions. All spaces from the recess area, including all sports court, can be used during any session of the syllabus to enhance meaningful learning.

⇒ **Psychomotricity classroom:** this space will be used in activities where mobility is needed, but in a more controlled way, specifically for fine motricity activities.

⇒ **Library:** the library is fundamental in this syllabus, since one of the main objectives will be introducing and learning how a scientific experiment is

held, by searching for information to verify the hypotheses made by the students.

⇒ **Computers room:** this space will be used when individual work precises for students to have their own computer or ICT tool, beyond the computer available in their classroom.

⇒ **Musical room:** this space holds all instruments adapted and available for ECE where some sessions can take part.

8.2.6. ICT Resources

ICT resources are actively part of the syllabus since technology has an important role during every scientific process and should be an essential part of the learning process. For this, computers and iPads will be specifically for the individual's students work, allowing students to access information in a controlled way. Inner motivation is one of the reasons why to introduce technology in our nowadays classrooms, to be used in a responsible way.

Also, other ICT resources will be available in the classroom, including a digital whiteboard used in different dynamics and activities such as morning assemblies, video projection, interactive activities… Also, the class is equipped with high-quality speakers for playing sounds and music. Furthermore, the school has a computer room, which is adapted for ECE and can be used when needed prior being booked.

In terms of the methodology used in the present syllabus, several programs and website such as Wix, Canva or Plickers will be used for increasing inner motivation and introduce gamification for the sessions.

9. Evaluation

As specified in the *Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil,* the evaluation must be taken as a global, evaluating through all the process instead of focusing the evaluation of the final product of the unit. As for this, the evaluation process must involve observation as a fundamental tool, in order to analyze the student evolution through all the unit and, furthermore, the academic year.

Also, it is important to focus on the learning moment from which the student departs, so we give diverse learning moments the importance that they have. It is vital to take into consideration that every student comes from a different background and social setting, especially in their English learning opportunities. Furthermore, continued evaluation through the academic year should be as important to understand how the methodologies and activities selected are impacting a specific child and to give us feedback in our own personal teaching performance.

All evaluation processes will be held not only when the project or unit is finished, but all along the process. In **the beginning of every unit**, the first session will be established in order to determine which contents and knowledges the students already have, to accommodate the English language learning process to all of their individual differences.

Also, evaluation will be held along the learning process, as a **continuous evaluation**, to analyze how the students are learning and if the proposed activities have the expected result on our students. Also, this continuous evaluation will provide students with feedback to know if they are doing a good job. The **final evaluation** will be based in the objectives and contents proposed at the beginning of the unit, to analyze if they were accurate and have been acquired along the unit (see evaluation rubric in annex 3.20)

All three areas of learning (growth in harmony, discovery and exploration of the environment and communication and representation of reality) should be specified as they refer to different contents and evaluation criteria. As for this, the evaluation section should be divided into three main aspects: tools, procedures, and criteria.

9.1. Tools

In this section, all elements used in the evaluation process will be listed and described.

- **Specific rubrics:** for concrete activities, an evaluation rubric will be needed, so the teacher can analyze their performance in that determined activity
- **Unit's rubric:** every unit will have a specific rubric englobing all contents included for that specific planning, so the teacher can guarantee all contents have been worked on deep and meaningfully (see annex 3.20)
- **Specific tools to auto evaluate themselves:** such as learning targets, class's traffic lights…
- All activities done in the sessions, by the **observation of the teacher.**

9.2. Procedures

Procedures can be defined as ways to evaluate our children during a session. It can be:

- **Self-evaluation:** when doing determined activities, other evaluation resources could be used to guarantee how the activity has been perceived, if the students have or have not like it and checking if they have learnt what has been expected. Also, other elements could be evaluated such as their own performance on determined activities or in general during the session (see annex 3.22.)
- **Peer evaluation:** after collaborating with others in a specific activity or session, it is important to give students the change to evaluate others to

identify if there has been any conflict or to analyze if a specific combination of children has worked well together.

- **Teacher's continuous evaluation:** this evaluation technique will be divided into three different categories for each student: prior to the unit, through the unit and after finishing it. This evaluation will cover not only procedimental aspects, but behavior and participation will also be taken into consideration. For this evaluation technique, not only the teacher will include information, but all educational figures that are part of the child's learning process (such as other teachers, language assistant…), according to the evaluation criteria defined for each specific session
- **Teacher's self-evaluation:** by the end of each unit, the teacher will recapitulate all sessions and highlight the activities that have gone as expected and explaining why. With this information, the teacher should know which type of activities are more suitable for further session. Also, the teacher will think about another activities that have not gone as expected, remarking also why he/she thinks that (see annex 3.21)

9.3. Criteria

The evaluation criteria can be found, according to *BOCM 36/2022.* in the Annex 3.19, which will be taking into account while evaluating the students through the academic year.

10. Attention to diversity

As for the internal attention to diversity, the terminology in schools is students with Specific Educational Support Needs. These students require of different varieties of methodology or evaluation, but not requiring of variations of the curriculum or contents.

When it comes to taking into account present diversity in our classroom, it is important to develop an inclusive vision of our students, giving them opportunities to be themselves. The Universal Design for Learning (UDL; Alba Pastor, C., 2019) is fundamental to design an adequate learning experience, to make sure the students are provided with an adequate inclusive education that gives them the opportunity to learn. Accessibility and flexibility are two of the fundamental bases of this theory, by identifying present educational barriers all students have and design all activities to give response to their personal characteristics. Neuroscience has also made an impact to UDL, by identifying three main channels affected by educational processes: the affective channel (related to emotional experiences and personal meanings), the recognition channel (from which stimuli are recognize and given a meaning) and the strategical channel (linked to the executive function, gives us the control to do a specific task; p.59; Alba Pastor, C., 2019)

In the present syllabus, all channels are given response, by implicating our students with a brand-new universe called STEAMland, in which they are the main characters and would need to build it from scratch. Also, by providing students with real context about experiments and scientists, there would perceive the project as approachable and real, collaborating with other to solve the different tasks of every unit. Also, every activity will be done with a purpose, after reflecting in our proper learning process, discriminating which actions we have done correctly, and which other will need to be improved in the future.

To provide students with several ways of showing the information (p.61; Alba Pastor, C., 2019), all three projects have been designed to present information in several formats and ways. Also, by learning both in Spanish and English,

students will be able to link almost immediately several types of informational inputs, which would result to perceptive improvements. Presenting the information in all type of formats will result in students being able to interconnect all their learning processes, generating neurological connections in between the different areas of learning. Mathematical concepts have been designed to be learn through language, since most of the contents are abstract for children and can be perceived as a barrier. All activities are interconnected in between them by a story told at the beginning of the unit and that answer a specific task, which is necessary in order to activate previous knowledges. To learn how to do an experiment, the teacher will guide the students in all steps, by giving a reference on how to do every part of the process, to make it accessible for student.

In last place, providing students with different ways to act and express their learning process is also a priority in the present syllabus, by giving meaning to all learning made in the classroom. All units have been designed to provide different tasks to students, so they can express their learnings in different ways. In all three projects, the final task is different, also in between the units, including also technological tasks. Summing up abstract concept in specific representations such as images, timelines, posters… is an excellent way to enhance complicate concepts and illustrating them. Finally, all units take into account executive functions as a way to recognize in which step we are and at which step we would like to arrive. These functions respond perfectly to nowadays diversity, by giving students the opportunity to analyze and organize their own learning process. As for this, UDL is essential to integrate all type of students in every class, giving them the chance to shine with their own individual characteristics.

In the class from which the present syllabus has been created, more or less every child has the same level of English, but, as normal, not all of them learn the same way. As for this, in all sessions, there are different activities that answer to all necessities and intelligences children can have. Having this diversity of interests is essential in order to provide a meaningful experience for all kids, and not leaving anyone behind. Multiple intelligences theory (Howard Gardner, 1983) has allowed teachers to help their students to find their inner motivation, by

potentiating different educational perspectives. All syllabus has been created for this, to provide meaningful experiences to students with different learning styles.

Also, since there are two children in the class that have not been to school prior the present academic year, other human resources could help them if necessary, so they understand everything and are part of the group. Also, there are other children in the class who have some trouble in Mathematics, so all mathematical learnings will be interconnected with other STEAM activities, to provide a more meaningful perspective.

For this year's project, the theme of STEAMland has been chosen in order to create a brand-new world in which all students can be welcomed without any language or cultural barrier. STEAM is spread worldwide, with all cultures being part of something mayor no matter their individual characteristics. In our class, since some of the students come from other cultural backgrounds. The first project has been designed in order to students to have time to create their own personal STEAMland universe, being the second project the one that interconnects our classroom set-up to other cultural civilization that have had an immersive cultural impact on us.

Also, since most students present difficulties in certain areas, all projects have been designed to englobe all different three areas established in the *Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas*, to develop not only a specific competence at a time but developing of all of them during all the academic year in different ways. Also, the classroom arrangement has been designed in order to correlate the different corners to the activity done at each moment. By creating different spaces in the classroom, children will know what to be expected when doing an activity there, in case any of them needs of anticipation in their daily routines. Also, the corners answer to different educational demands, such as intercalating calm and peaceful corners or activities with others that require more movement. The *take a breath and relax* corner is an essential tool that gives response to actual diversity, where students can just take a minute and breathe if the activity is overwhelming.

In the Spanish educational system, there are specific students considered ACNEAE, if their characteristics allow them to follow ordinary education with specific adaptations or reinforcements. If the students do not answer to an intervention in which the proper curriculum or objectives are still the same, they are reevaluated by the Orientation department to be considered as ACNEE students. These students are considered as students with Special Educational Needs and need different objectives and goals that the rest of students, they need educational adjustments. There are two types of adjustments that can be made in order to respond to special needs at schools, depending on the contents, objectives and evaluation and how these are modified in order to achieve the same or different objectives.

As for the present paper, in the class there are a total of 20 students, from which 20% of them are ACNEE or ACNEAE. Two of these children present attention deficit hyperactivity disorder (ADHD), which is an ACNEAE type of disorder, so modifications and adaptation will be non-significant, such as a non-distractive environment in the classroom, so they can focus on the lesson being taught. Also, as regulated by the Comunidad de Madrid, these children would benefit from non-significant measures for evaluation accessibility such as more time to complete designated tasks, presenting the exercises by fragments, so they can focus on a piece before starting other, other ways of presenting several activities... The information that will be presented for them will be in a clearer way, without distractions, with an extra sheet with instructions for them to follow and complete the worksheet efficiently. Also, the entire syllabus has been designed so kinesthetic and working activities are intercalated, so all students can move before working time.

Also, other two children have the necessity of adaptation of the activities, but in this case, because of their high ability. These types of changes will require significant modification, being the only case of ACNEAE student who can be modified the curriculum for. The tasks provided for them will include not only the same contents as the rest of the class, but others from an upper level (in this case, 1º grade of Primary Education), by giving them riddles and other tasks that

activate other type of abilities such as investigative or creative tasks. These tasks will be optional, only if the student needs the necessity of keep on working.

Kite School has an agreement with the Special Education school Hospital San Rafael, for students at this school to come to 1 session per week, specifically to the English class. The objective of this is to make visible other type of educational experiences by welcoming them into our classroom and sharing with them another type of educational experiences. One 5-year-old boy will come once a week with his teacher to learn with us, in our classroom. In the sessions where the student will be present, all motoric activities will be adapted so it can be followed with flexibility,

If necessary, the present syllabus could be adapted to other ACNEE, ACNEAE or diversity conditions the students present, such as motoric, visual disabilities, other type of disorders or enhancing more certain type of the activities. The main goal on every syllabus should be providing our children with a tailormade educational project, in which diversity is encouraged. For this, it is encouraged to communicate with the family at all points during the academic year, to make sure all teachers take into consideration every child's background, so we can adapt our sessions to their reality.

11. Contribution of programming to the development of other plans

With the present syllabus, the aim is to contribute all plans established by the school and that guarantee an integral and complete development of the student. These plans have been integrated into the syllabus in order to enrich the student's learning process and to contribute to the acquisition of several abilities.

11.1. Contribution of the present syllabus to English language development

As mentioned before, Kite School provides students from ECE with opportunities to learn English through other subjects, that is the reason why some of the sessions are being taught in English. The objective of the English department is to introduce English to students in a familiar way, by creating projects in which English and Spanish will be used. The aim is to familiarize English so students like it and want to pursuit in learning this language, by their inner motivation.

All projects and present syllabus have integrated English in the contents selected for it, to have fun while learning English. By this, the aim is to present English as an interesting subject, for students to want to investigate and learn more about it. Also, to contribute to this specific plan, the language assistant will have an important role in our session, in order to approach English to students in a meaningful way. Also, all pronunciation and phonetics will be reinforced by this figure, so students have the experience of talking with a native speaker to improve their speaking abilities.

11.2. Contribution of the present syllabus to the development of coexistence and citizenship

This plan has the aim of increase citizenship awareness, which means integrating our students in the present diverse society by being citizenships, contributing to their own society and empathetic within others. The present syllabus has active connections towards realities outside the school, so students know the real meaning of that they are learning. The reason why choosing

STEAM as our main theme during the academic year is because its presence in our society and the importance it should have. By working with PBL, mostly all activities are being hold in a cooperative and collaborative way, so students must work together to achieve a common goal. It is important to give our children, specially of such young age, the opportunity to work together, so their own characteristics and abilities can be put together to provide an enriched common goal.

Also, all projects have been designed to provide students with opportunities to be part of this specific plan. In the first project, by creating a common community, students can feel as belonging of it, which will enrich their learning experience. Furthermore, in the second project, by providing examples of other countries about their STEAM contributions, students will identify other people different from them but achieving their same goals. Lastly, in the third project, the aim is for students to be involved in their community, by having to express their learning processes not only to their families but to the school.

11.3. Contribution of the present syllabus to the development of ICT and Digital Competence

The present syllabus enhances children to acquiree digital competences in order not only to use them but to understand how to use them safely, in a didactic way. For this, the last project has been designed to incorporate technology as a way to express themselves but learning how to use technological devices efficiency and safely. Furthermore, through all the academic year, students will combine in between multiple activities, including ICT resources such as Plickers, Kahoot, within others. Most of the days, students will use the digital board of the classroom and the tablets shared by all the EC Education. In these activities, students will learn how to use these devices (how to turn it on and off, use the mouse, distinguish in between which applications are safe to play). Technology provides with an excellent inner motivation for children, specially nowadays where most things are controlled by technology. This is the reason why it is fundamental to incorporate it into our daily sessions.

11.4. Contribution of the present syllabus to the development of reading

In the present syllabus, one of the methodologies selected has been storytelling, in order to encourage students to read through example, with tailor-made stories of every unit, introducing them in a meaningful way. Stories provides students not only with context and visual representation of several scenarios, but with the graphic representation of words and its relationship with its pronunciation and sounds.

Once Upon a Time corner has been created in our classroom to empower the use of stories in our daily life, by providing an “active” library, where books will be selected each year depending on the project and storyline followed. This is because, if students find stories about what their learning through the academic year, they will continue learning without noticing it. The active library concepts also allow students to bring their own stories into the classroom and share them with other, to enhance collaboration and friendship. Even not having achieved a complete and fluent reading and writing, the aim of this corner is that students want to read because they like it, which will benefit not only their academic performance during the present year, but through all their life.

Also, since all stories made for the syllabus have been designed for each unit, students will be the true protagonists, because they are part of STEAMland, which is the scenario for all of them. By giving them the opportunity to shine in these stories, children will be more involved and actively participating in all dynamics. Other reason to include storytelling in the present syllabus is because STEAM concepts can be very abstract and non-tangible. If we present the information and vocabulary through stories, we will give it a more meaningful approach.

12. Conclusion

Developing the present syllabus has been a long process where I have challenge myself to program for EC. Having the chance to program all of it, it has been a great responsibility because it only depended on me. The process has been very interesting, from choosing the theme of the proposal to selecting which contents will fit with my initial idea. All learnings done through my career have been tested and sometimes I had some trouble identifying certain things or having to manage laws required from programming.

I personally believe one of the greatest challenges I have found during the process is to settle down my imagination and creativity into activities, objectives and learning outcomes suitable for 5-year-old children. I have done most of my internships in Primary Education, where children know have the autonomy to do most of the activities, but when programming for ECE, I found out that some of the activities I have thought of where too difficult or to abstract for them. For this, I have found that the flexible curriculum of ECE has helped me a lot to adapt these activities into suitable for this range of age, specially to the diversity present in this classroom.

Also, by selecting STEAM as my focus for the academic year, it was drowned to my attention which methodologies where more suitable and will make this approach more appealing. For this, I wanted to create a unique universe, where STEAM was more than something you come across in a certain moment of our life, but as a starting point from where students could learn English experimenting. For this, PBL was perfect for the purpose, because it allowed students to be part of the learning process and, specifically for the present syllabus, be part of STEAMland. The projects have been designed for students to getting to know our universe little by little, providing them with challenges that will activate their inner motivation.

For this, there was not better way that to introduce storytelling as the other main methodology of the syllabus, to enhance reading and to make visual all

learning process, due to the abstract it can be some STEAM concepts. These combination in between STEAM and English was because I find the English learning process for EC should be as appealing and motivating as possible, so students develop an intercultural mindset and keep on learning English because they like it. English learning should be motivating and active, that is why some of the activities of the syllabus have incorporated a motoric dimension, so students can experience what STEAM is.

Furthermore, I think the present syllabus is the best way to end my academic stage, because it has allowed me to think about how my professional career is going to be and design how I want it to be. I did not think before doing it that I would actually like doing it but know I can affirm I definitively see myself being an English teacher. Also, I will love to put into practice all activities designed in this syllabus, to really make a difference in any child's English learning process. I think I have really grown up, not only as a person but as teacher, during all this process and I really look forward to having my own class in the future.

Lastly, I would like to give special recognition not only to myself but to the people that have helped me, specially to my director Lyndsay Buckingham, for believing in me through all this process and to encourage me to give the best out of me though all my academic career, I cannot thank you enough. And to all of the children I have had the pleasure to spend time with during all these years, for proving me that magic is all around us and that it is our choice to see it or not.

13. Bibliography

Aktürk, A. A., & Demircan, O. (2017). A review of studies on STEM and STEAM education in early childhood. Ahi *Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD), 18(2),* 757-776.

Alba Pastor, C. (2019). Diseño Universal para el Aprendizaje: un modelo teórico-práctico para una educación inclusiva de calidad. *Participación educativa.*

Andersson, K., & Gullberg, A. (2014). What is science in preschool and what do teachers have to know to empower children? *Cultural studies of science education, 9*, 275-296.

Bertrand, M. G., & Namukasa, I. K. (2020). STEAM education: student learning and transferable skills. *Journal of Research in Innovative Teaching & Learning, 13(1),* 43-56.

Campbell, C., Speldewinde, C., Howitt, C. & MacDonald, A. (2018). STEM Practice in the Early Years. *Creative Education, 09(01),* 11–25.

Cocco, S. (2006). *Student leadership development: The contribution of project-based learning*. Royal Roads University, Victoria, BC, Canada.

Chan, C., Cheng, R.W. & Lam, S. (2010). School support and teacher motivation to implement project-based learning. *Learning and Instruction*, 20, 487–497.

Chan, C., Cheng, R.W. & Lam, S. (2008). When high achievers and low achievers work in the same group: The role of group heterogeneity and processes in project-based learning. *British Journal of Educational Psychology, 78,* 205–221.

Decreto 36/2022, de 8 de junio, del Consejo de Gobierno, por el que se establece para la Comunidad de Madrid la ordenación y el currículo de la etapa de Educación Infantil

DeFillippi, R. J. (2001). Introduction: Project-based learning, reflective practices and learning. *Management learning, 32(1),* 5-10

Gardner, H. (2005). *Inteligencias multiples* (Vol.46.). Paidós.

Gonzalez, H. B., & Kuenzi, J. J. (2012, August). *Science, technology, engineering, and mathematics (STEM) education: A primer.* Washington, DC: Congressional Research Service, Library of Congress.

Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education–theory, practice and rubber sling shots. *Higher education, 51,* 287-314.

Kermani, H. & Aldemir, J. (2018). *Exploring the impact of a stem integration teacher professional development program on early childhood teachers pedagogical.* USA: Delmar Cengage Learning.

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving schools, 19(3),* 267-277.

Koutrouba K., & Karageorgou E. (2013). Cognitive and socio-affective outcomes of project-based learning: Perceptions of Greek Second Chance School students. *Improving Schools, 16,* 244–260.

Krogh, S. L., & Slentz, K. L. (2010). Early childhood education: Yesterday, today, and tomorrow. *Routledge.*

Orden 1434/2018 de 19 de abril de la Consejería de Educación e investigación, por la que se regula la extension de la enseñanza bilingüe español-

inglés en el Tercer ciclo de Educación Infantil en los centros privados concertados bilingües del ámbito de gestión de la Comunidad de Madrid

Phillips, L. (2000). Storytelling: The seeds of children's creativity. *Australian journal of early childhood, 25(3),* 1-5.

Portis, A. (2020). *Hey, Water!.* Holiday House.

Ravitz, J. (2010). Beyond changing culture in small high schools: Reform models and changing instruction with project-based learning. *Peabody Journal of Education, 85(3),* 290-312.

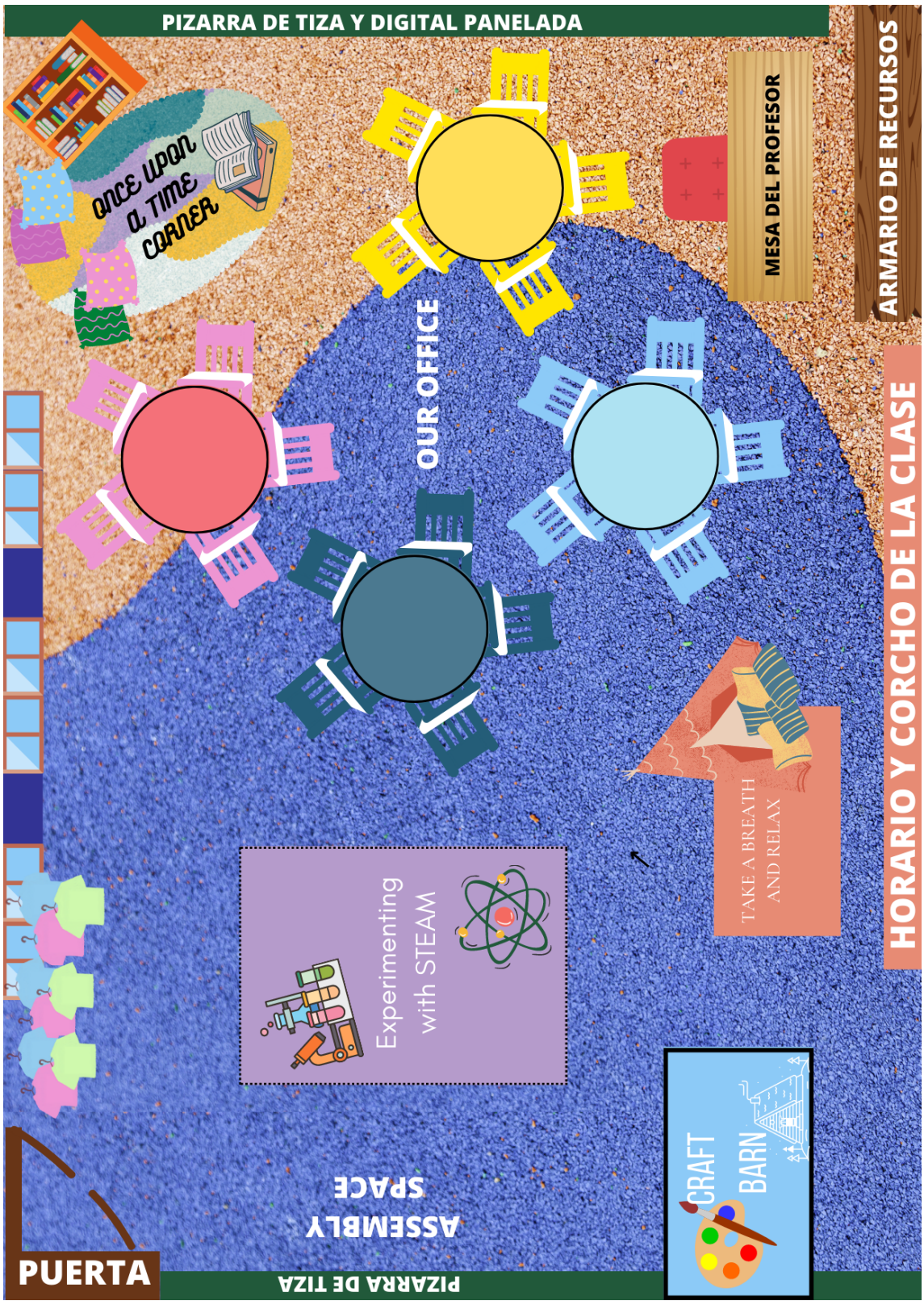
Real Decreto 95/2022, de 1 de febrero, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Infantil

Schick, A., & Melzi, G. (2010). The development of children's oral narratives across contexts. *Early Education and Development, 21(3),* 293-317.

Wahyuningsih, S., Nurjanah, N. E., Rasmani, U. E. E., Hafidah, R., Pudyaningtyas, A. R., & Syamsuddin, M. M. (2020). STEAM learning in early childhood education: A literature review. *International Journal of Pedagogy and Teacher Education, 4(1),* 33-44.

14. Annexes

ANNEX 1. DISTRIBUTION OF THE CLASS



ANNEX 2. ACADEMIC YEAR CALENDAR OF THE COMUNIDAD DE MADRID FOR 2022-2023

Comunidad de Madrid

CONSEJERÍA DE EDUCACIÓN, UNIVERSIDADES, CIENCIA Y PORTAVOCÍA

Calendario escolar 2022 – 2023

Cuadro síntesis informativo

SEPTIEMBRE 2022

L	M	X	J	V	S	D
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTUBRE 2022

L	M	X	J	V	S	D
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVIEMBRE 2022

L	M	X	J	V	S	D
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DICIEMBRE 2022

L	M	X	J	V	S	D
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

ENERO 2023

L	M	X	J	V	S	D
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

FEBRERO 2023

L	M	X	J	V	S	D
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARZO 2023

L	M	X	J	V	S	D
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

ABRIL 2023

L	M	X	J	V	S	D
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAYO 2023

L	M	X	J	V	S	D
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNIO 2023

L	M	X	J	V	S	D
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULIO 2023

L	M	X	J	V	S	D
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

A efectos académicos:

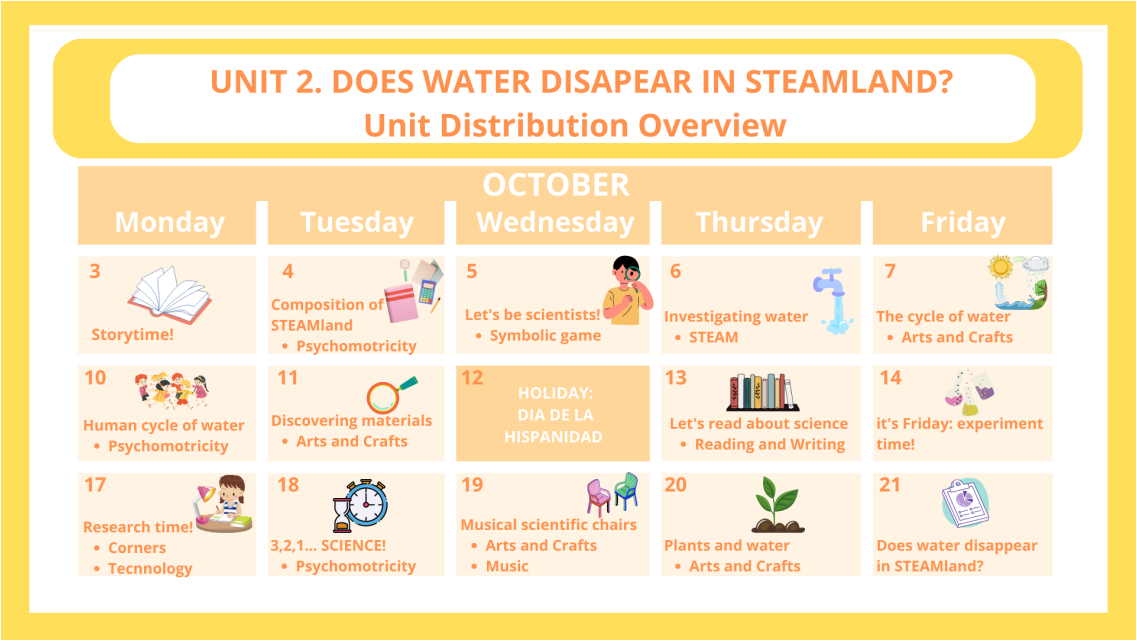
- Inicio de periodo lectivo alumnado enseñanzas correspondientes.
- Día festivo/vacacional enseñanzas correspondientes.
- Otros días no lectivos enseñanzas que corresponden.
- Evaluación final ordinaria enseñanzas que correspondan.
- Repaso y actividades formativas enseñanzas que correspondan.
- Última día lectivo alumnado enseñanzas correspondientes.

ANNEX 3. DIDACTIC UNIT

The unit chosen is part of the first project called **First Project: Experiment with the elements in STEAMland,** being the second unit: Does water disappear in STEAMland? The unit will last three weeks, from October 3rd to October 21st

In the present annex, all the didactic unit can be found, as well as all materials elaborated for the present project. There is a table containing all elements necessary for each specific session, and a unit distribution image, where all sessions can be found, highlighting the type of activity done in each one of them. Also, the evaluation materials and criteria are included in these sections, as well as a description of the complementary Spanish sessions where all vocabulary will be translated into Spanish.

ANNEX 3.1. Unit Distribution



ANNEX 3.2. Sessions' distribution tables

SESSION 1 (October 3rd): STORYTIME!

Summary: This session will help students to understand the unit in which they are going to be involved by reading all together a story created specifically for the unit.

SESSION NAME:	**STORYTIME!**		
UNIT 2	LESSON 1 **October 3rd**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CCL, CMCT**		
Specific competences[1]	**Área I. Crecimiento en armonía:** 1 **Área III. Comunicación y representación de la realidad:** 1,3,5		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Positive attitude towards the foreign language and interest in participating in interactive oral situations - Basic comprehension of simple English texts		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *C. Hábitos de vida saludable para el cuidado de uno mismo y del entorno* - Planificación de las acciones para resolver una tarea		
Lexis and grammar	- Elements: earth, wind, fire and water - Words related to the elements: burn, hot, ice, air, blow, breath, dirt, seed, plant		
Learning outcomes	Students will be able to: ⇒ Understand the general idea of the story proposed		

[1] *All specific competences are developed in annex 3.18. Specific Competences (substracted from BOCM 36/2022)*

	⇒ Identify and say in English key words related to the unit		
Materials	⇒ "Does water disappear in STEAMland ? Storybook ⇒ Flashcards ⇒ Blackboard	**Spaces**	Classroom ⇒ *Once upon a time* corner ⇒ Assembly corner
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
5 minutes	Warm-up	When arriving at the classroom, we will find in the STEAMland mural (located in the assembly's wall) an envelope and a storybook called "Does water disappear in STEAMland?" (see annex 3.4.). Altogether, the students will identify to which corner we should go, being the *Once Upon a Time* corner.	Whole class
10 minutes	Warm-up	Firstly, the teacher will open the envelope and find three images (see annex 3.3.) All together, we will talk respecting turns and try to figure it out their meaning	Whole class
20 minutes	Reading and listening	The teacher will start reading the unit's story (see annex 3.4.) in an interactive way, by asking students	Whole class

		questions in the middle of the story. The students will have to identify key elements while listening to the story (for the story's script, see annex 3.16)	
5 minutes	Speaking	After the story, the students will have to identify which is the challenge for the unit	Whole class
10 minutes	Arts	After the story, the students will have to make a drawing that sums up the story and the challenge of the unit, in the *our office* corner. After they have finished, the teacher will stick the drawings into the STEAMland mural.	Whole class

SESIÓN 1.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

En la próxima sesión de "proyecto", se trabajarán los conceptos trabajados en la sesión 1 en español. La profesora leerá la historia en español (ver anexo 3.5.), incluyendo todas las palabras trabajadas en la historia traducidas, para que así los alumnos puedan vincular los aprendizaje realizados también a su traducción a español. Las "flashcards" elaboradas para la sesión en inglés pueden ser utilizadas en esta sesión para seguir trabajando en todo momento con las palabras en inglés, pero traducidas en este caso a español.

SESSION 2 (October 4th): Composition of STEAMland

Summary: In this session, students will learn more about the four basic elements: earth, wind, fire and water, by representing different scenes in a kinesthetic way

SESSION NAME:	Composition of STEAMland!		
UNIT 2	LESSON 2 **October 4th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CCL, CCR**		
Specific competences	**Área I. Crecimiento en armonía:** 1 **Área III. Comunicación y representación de la realidad:** 2,3		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Key elements for a functional communication in English - Order and question comprehension		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *A. El cuerpo y el control del mismo* - Referencias espaciales: arriba-abajo (up-down) *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Identificación.y características de los elementos naturales: agua, tierra, fuego, aire		
Lexis and grammar	- Spatial references lexis: up-down - Spatial references grammar: go up, go down - Elements lexis: earth, wind, fire and water		
Learning outcomes	Students will be able to: ⇒ Distinguish the different elements: earth, wind, fire and water ⇒ Associate each element with a movement ⇒ Distinguish in between up and down while moving an object		
Materials	⇒ Elements flashcards (see	**Spaces**	Classroom

	annex 3.6.)		
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
5 minutes	Warm- Up	Students will be gathered in the *assembly* corner, and recap which elements conform STEAMland, as shown in the story from last session.	All class together
5 minutes	Warm-Up	Students will be paired up with another child. They will have to mimic one of the elements and the other person will have to guess it in Spanish and English	In pairs
10 minutes	Speaking	In this activity, the class will be divided into four groups, one for each element. While projecting all four images in the whiteboard, the teacher will point out one, and the group from that element will have to stand up and shout: **we're the fire/water/earth/wind!**	Class divided into four groups
15 minutes	Listening and psychomotricity	After this task, the students will gather up and the teacher will associate each element with a movement: **AIR:** with our arms opened, moving them up and down **LAND/EARTH:** crawling in the floor **EARTH:** moving our arms as we're swimming	

		WATER: moving our arms up and down as fire flames Altogether, we'll watch the next video and do the movements along it YOUTUBE: Water! Land! Air! Songs for kids I Kids channel I Learning through music[2]	
10 minutes	Psychomotricity	In this activity, and with the specific movements' students have associated with each element, all the class will play a game called **1,2,3… element!** In this game, the teacher will be backwards her students and will chose one of the four elements. After counting 1,2,3... she will show the students the movement chosen. The rest of the children will also have selected one of the movements. The winner will be the child that guesses the movements in all rounds	Whole class
5 minutes	Wrap-up	All students will return to the assembly area and give thumbs-up or thumbs-down to the different activities done in the session, as a way to self-assess reach specific activity. After this, the teacher will	Whole class

[2] https://www.youtube.com/watch?v=7V9ndxUWx50

		ask one student that has given thumb-up to say why and another with their thumb-down to give their reason why.	

SESSION 3 (October 5th): Let's be scientists!

Summary: In this session, the students will start learning about the different stages of an experiment through psychomotricity, arts and crafts.

SESSION NAME:	**Let's be scientists!**		
UNIT 2	LESSON 3 **October 5th**	GROUP 5ºA	DURATION**:**
FOCUS			
Key competences	**CP, CPSA, CCR**		
Specific competences	**Área I. Crecimiento en armonía:** 3,4 **Área III. Comunicación y representación de la realidad:** 2		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Comprehension and production of poems, songs, riddles…		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *D. Personas y emociones. La vida junto a los demás* - Juego simbólico - Observación, imitación y representación de personajes y situaciones		
Lexis and grammar	- Scientific lexis: scientist, experiment, hypotheses, observe, research - Elements lexis: earth, wind, fire and water		
Learning outcomes	Students will be able to: ⇒ Know more about a scientist's job		

	⇒ Play being scientists ⇒ Describe with key words what a scientist does		
Materials	⇒ Whiteboard ⇒ Large piece of paper ⇒ Different elements' cards and photos ⇒ Paint ⇒ Recipients	**Spaces**	⇒ Assembly corner ⇒ *Experimenting with STEAM corner*
Procedures			
<u>Timing</u>	**<u>Stage/substage</u>**	**Activities**	**Grouping**
10 minutes	Warm-up, psychomotricity	First, all students will gather up in the assembly area. The teacher will bring different photos of the elements shown in the session before. In turns, students will have to classify them in the "Earth, Wind, Fire or Water" section	Whole class
15 minutes	Speaking and writing	After this, the teacher will bring them a large piece of paper in which there would be a question: **WHAT IS A SCIENTIST?**	Whole class, but individually

		All kids will take a pen and write or draw words related to scientists, either in English or Spanish (for example: experiment, glasses…)	
15 minutes	Symbolic game	In this activity, we will watch a short video in Youtube called: Let's be scientists![3] After watching it, all students will gather in the *Experimenting with STEAM corner* to mix up different colors, as shown in the video, by turns, so we can create new colors by mixing existing ones.	Whole class
10 minutes	Wrap-Up	After this, we will bring the large paper again to the *Experimenting with STEAM* corner. Using the paint we have created, students will paint their hand with it and paint the paper with their handprint.	Whole class, but individually

[3] *https://www.youtube.com/watch?v=uGCexyr4IYw&t=53s*

SESION 3.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

Después de esta sesión, se pueden utilizar algunos minutos en la clase de proyecto para hablar con los alumnos en español sobre qué es un científico y qué labor tiene, para que así las palabras trabajadas en inglés puedan ser reforzadas en español. El mural conformado en la sesión se completará con la traducción de las palabras en español

SESSION 4 (October 6th): Investigating water!

Summary: In this session, the students will start making hypotheses about what's going to happen with each one of the materials, verifying them afterwards

SESSION NAME:	**Investigating water!**		
UNIT 2	LESSON 4 **October 6th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CPSA, CCR**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1,2 **Área III. Comunicación y representación de la realidad**: 1,3		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Positive attitude and participation towards oral interactions and routines in English - Basic structure to formulate hypotheses: I think it will…. - Basic lexis related to the experiment: sink, float - Basic lexis related to the materials used in the experiment		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Comparación a través de la manipulación y experimentación		

	B. Experimentación en el entorno. Curiosidad, pensamiento científicico y creatividad - Hallazgos y conclusiones		
Lexis and grammar	- Materials lexis: egg, water, sugar, salt, sparkling water - Experiment lexis: clear recipient, research paper - Hypotheses grammar structure: I think it will…		
Learning outcomes	Students will be able to: ⇒ Understand the concept of density ⇒ Formulate hypotheses about different situations ⇒ Verify their hypotheses by doing the experiment		
Materials	⇒ Water drops' images ⇒ Research paper (see annex 3.7.) For the experiment: ⇒ Clear recipients ⇒ Sugar ⇒ Salt ⇒ Sparkling water ⇒ Eggs	**Spaces**	⇒ *Our office* space ⇒ *Experimenting with STEAM corner* ⇒ *Assembly corner*
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
10 minutes	Warm-Up	Prior to this activity, the teacher will have to have	Teams

		hidden several water drops in all the class. One kid per table will have to go and find one, before the next one can go.	
15 minutes	Speaking and writing	After this, the teacher will introduce today's experiment to the children. Firstly, the teacher will explain how all materials needed for the experiment are named, in English and in Spanish. The students will have a research paper, in which they will have to write and draw the element needed for the experiment (see annex 3.7.)	Individually
15 minutes	Speaking	After this activity, all students will be gathered in the *Experimenting with STEAM corner,* where the experiment will take place. The experiment consists in four different recipients, each one with water, with a different element	Whole class

		• In the first one, there will be water • In the second one, there will be water and sugar • In the third one, there will be water and salt • Lastly, in the fourth one there will be sparkling water The teacher will tell the students that an egg will be dropped in all recipients. Before it, the teacher will explain to the students how to create a hypothesis. 1) We draw the material 2) We say: it will sink/float 3) We drop the egg in the container and observe what happens. Students will have to tell first what they expect it will happen, and the language assistant will write the hypotheses and the votes for each one of them in the blackboard.	

		By turns, children will drop an egg in each recipient and see what happens.	
10 minutes	Wrap-Up	All class will go to the Assembly area to discuss the experiment's result and discuss why this has happened. Also, we'll ask them if they have liked the experiment and session's activity	Whole class

SESSION 5 (October 7th): The cycle of water

Summary: In this session, students will create a model of cycle of water, with its different phases.

SESSION NAME:	**The cycle of water**		
UNIT 2	LESSON 5 **October 7th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CCL, CMCT**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1 **Área III. Comunicación y representación de la realidad:** 3,4		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Oral expression in English: key vocabulary related to the cycle of water (evaporation, condensation, precipitation, transpiration) - Key vocabulary related to the states of water: ice, gas, liquid water, drops…		

	- Temporal words such as first, next, then, last…		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Elementos naturales: agua. Características y comportarmiento - El ciclo del agua		
Lexis and grammar	- Water cycle lexis: evaporation, precipitation, condensation, and transpiration, cloud, ocean, sea, river, water drop, ice, gas, liquid - Numbers up to 4 - Temporal lexis: first, next, last		
Learning outcomes	Students will be able to: ⇒ Understand the water cycle phases ⇒ Elaborate a replica of the cycle of water ⇒ Enumerate the different water cycle stages: evaporation, condensation… ⇒ Enumerate all stages using temporal words		
Evaluation criteria	Participates actively in the activity Distinguishes if he/she has/hasn't liked the activity		
Materials	⇒ Water example photos ⇒ Whiteboard ⇒ Blackboard ⇒ Plastic bags ⇒ Markers ⇒ Water ⇒ Blue colorant	**Spaces**	⇒ Classroom

	⇒ Auto evaluation sheets (see annex 3.8.)		
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
5 minutes	Warm-Up, speaking	To start, in the assembly area, the language assistant will ask the students what they know about water, examples on where you can find it…	Whole class
15 minutes	Speaking	After this, we will watch a short video called "The water cycle"[4] by Happy Learning, describing all cycle of water stages. The language assistant will stop the video in certain parts and tell the students how certain words are called in English. The students will have to repeat the word and the language assistant will write it in the blackboard.	Whole class
20 minutes	Writing and reading	The students will move into the *Experimenting with STEAM* corner, where the teacher will be waiting to explain how they are going to create their own cycle of	Individually

[4] *https://www.youtube.com/watch?v=YoGlwTIjHeA*

		water. The teacher will give a plastic bag to every student, where they will have to paint their own cycle of water, writing the name of every phase. After this, by turns, they teacher will fill up half of the bags with water with food coloring, and they will be placed in the classroom's window.	
10 minutes	Wrap-Up	Students will have to complete a self-evaluation paper (see annex 3.8 and annex 3.22) and give it to the teacher when done	Individually

SESIÓN 5.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

Después de esta sesión, en la asamblea, recordaremos en español cuáles son las fases del ciclo del agua, en español, para seguir trabajando el vocabulario, reforzado en la siguiente sesión

SESSION 6 (October 10th): Human Water Cycle!

Summary: In this session, students will represent the process of a drop of water in the cycle of water.

SESSION NAME:	Human Cycle of Water!		
UNIT 2	LESSON 6 **October 10th**	GROUP 5ºA	DURATION: 50 minutes
FOCUS			
Key competences	**CP, CCI, CCR**		
Specific competences	**Área I. Crecimiento en armonía:** 1 **Área III. Comunicación y representación de la realidad:** 3,5		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Oral expression in English: key vocabulary related to the cycle of water (evaporation, condensation, precipitation, transpiration) - Key vocabulary related to the states of water: ice, gas, liquid water, drops…		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *A. El cuerpo y el control del mismo* - Referencias espaciales en relación al propio cuerpo y al espacio de la clase: arriba-abajo, izquierda-derecha, delante-detrás **Área III. Comunicación y representación de la realidad** *G. Lenguaje y expresión plásticos y visuales* - Intención expresiva de producciones pictóricas		
Lexis and grammar	- Spatial reference lexis: up-down, left-right, behind-in front of - Water cycle lexis: evaporation, precipitation, condensation, and transpiration, cloud, ocean, sea, river, water drop, ice, gas, liquid		
Learning outcomes	Students will be able to: ⇒ Understand more in depth what the cycle of water is ⇒ Enumerate the cycle of water phases in English and Spanish ⇒ Identificate the stage of the cycle by observating the state of the water		

Materials	⇒ Large pieces of paper ⇒ Colors ⇒ Tape	**Spaces**	⇒ *Our office space* ⇒ Whole classroom
Procedures			
<u>Timing</u>	**<u>Stage/substage</u>**	**Activities**	**Grouping**
10 minutes	Warm-Up	We will start the class by remembering what we remember about last session, enunciating in English and Spanish the different phases of the water cycle. Also, we will observe our last session's experiment and talk about what has happened	Whole class
20 minutes	Writing, Arts and Crafts	We'll divide the class into four teams, corresponding with the table arrangement. Each table will have one phase of the cycle of water. They will have to create in a large piece of paper a poster that enunciates the phase's name and draw it	In teams
15 minutes	Psychomotricity	The posters will be located in a specific spot of the classroom, depending on the stage of the cycle of water that is represented. By turns, all the class will be like water drops and will have to move around the class and act as	Individually

		the stage of the cycle of water in which they are. When arriving next to one of the posters, the kid will have to say in English and Spanish the name of the stage in which she is.	
5 minutes	Wrap-Up	After this, students will have to join all the posters to create the cycle of water, which will be incorporated into our Unit 2 Mural	Whole class

SESION 6.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

Tras esta sesión, se volverá a hacer la misma dinámica, pero esta vez en español, para que los alumnos aprendan los nombres de las etapas del ciclo del agua en ambos idiomas. A su vez, traduciremos las palabras y las dejaremos plasmadas en el mural.

SESSION 7 (October 11th): Discovering materials!

Summary: In this session, students will create a multisensorial panel with different materials provided by the teacher. Before it, the students will learn different criteria about how to classify determined materials.

SESSION NAME:	**Human Cycle of Water!**		
UNIT 2	LESSON 7 **October 11th**	GROUP 5ºA	DURATION: 50 minutes
FOCUS			
Key competences	**CP, CCL, CMCT**		

Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1 **Área III. Comunicación y representación de la realidad:** 3,5		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Key vocabulary about the elements of STEAMland		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Relaciones de clasificación y comparación a través de la manipulación de distintos elementos **Área III. Comunicación y representación de la realidad** *G. Lenguaje y expresión plásticos y visuales* - Las técnicas de la expresión plástica: modelado		
Lexis and grammar	- Elements lexis: earth, wind, fire and water - Material lexis: rock, feather, flower, paper, rock - Adjectives: rough, soft, light, heavy - Grammar: the ___ is ____ (ex. The rock is heavy)		
Learning outcomes	Students will be able to: ⇒ Distinguish in between the different elements through a multisensorial panel ⇒ Recognize key words related to the different elements		
Materials	⇒ Flashcards (see annex 3.9) ⇒ Earth, wind, fire and water photographs ⇒ Natural materials such as rocks, feathers, flowers…	**Spaces**	⇒ *Our office* space ⇒ *Experimenting with STEAM corner*

	⇒ Whiteboard		
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
10 minutes	Warm-Up	To initiate the session, the language assistant will ask them about the different elements shown in the story of session 1. For this, the language assistant will read another time the story in the *Once upon a time corner but* making emphasis in specific words related to the session. Also, she will review the vocabulary with them thanks to the flashcards. The language assistant will make special emphasis in the concepts of: **ROUGH, SOFT** **LIGHT, HEAVY**	Whole class
15 minutes	Writing, arts and crafts	The children will find in the middle of the classroom a big mind map on the floor with the four elements and a pile of photographs (places where you can find the element, different materials…). By turns,	Whole class, but individually

		each one will have to pick a photo and stick it in the correct element	
20 minutes	Arts and Crafts	After the last activity, the teacher will provide the students with different earth materials such as rocks, grass, flowers… in groups, the children will have to elaborate a little multisensorial panel. In this panel, they will have to classify the materials from softer to rougher, and heavier to lighter	By teams
5 minutes	Wrap-Up	The "tidy up" song will be played, and the children will have to help the teacher and the language assistant to tidy up the classroom	Whole class

SESSION 8(October 13th): Let's read about science!

Summary: In this session, students will identify the different uses for water by researching, and will have to write them down

SESSION NAME:	**Let's read about science!**		
UNIT 2	LESSON 8 **October 13th**	GROUP 5ºA	DURATION**:** 50 minutes

FOCUS			
Key competences	**CP, CCL, CMCT**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1,3 **Área III. Comunicación y representación de la realidad:** 2		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Global comprehension of small texts, poems and songs in English about the water		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Conteo *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Elementos naturales: agua. Características y comportamiento		
Lexis and grammar	- Water uses lexis: flowers, people, animals, earth - Grammar: Water for _____		
Learning outcomes	Students will be able to: ⇒ Count up to 10 ⇒ List different uses for the water, following the structure “water for…” ⇒ Comprehend small texts, by using the images as support		
Evaluation criteria	Correctly spells all words related to the session Participates in the activity giving his/her ideas Properly respects their peer’s turn		
Materials	⇒ Riddle about the water (see annex 3.10) ⇒ Hey Water! Storybook by Antoinette Portis	**Spaces**	⇒ *Our office* space ⇒ Assembly area ⇒ *Once Upon a*

	⇒ Short stories about water ⇒ "Water for…" sheets (see annex 3.11)		*Time* corner
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
15 minutes	Warm-Up	The first activity will be in the assembly area. The teacher will bring an envelope with a riddle, so students will guess what it is: water! (see annex 3.10.) After this, the teacher will read outload the following book: *Hey Water!* By Antoinette Portis[5], asking the students questions along it	Whole class
10 minutes	Reading	The teacher will tell the students to identify in which places we can find water. The students will have to go to the *Once Upon a Time* corner to find books in which water is present. When finding something, they will have to write or draw it in a sheet of paper.	Individually

[5] *Portis, A. (2020).* Hey, Water!*. Holiday House.*

15 minutes	Speaking	After this, the teacher will ask the students to tell her what they have found. He/she will write it in the blackboard, with the following structure: *Water for _____* *Water for_____* Some examples for the previous structure could be: flowers, plants, trees, humans… The students will have to copy the term in their "water for…." Sheets (see annex 3.11.)	Individually
10 minutes	Psychomotricity	After this activity, the students will hear the song called: Water song for kids![6] The teacher will do some movements while singing, and the children will have to copy them and sing along	Individually

SESSION 9 (October 14th): It's Friday: experiment time!

Summary: In this session, students will participate in the elaboration of different experiments related to water, identifying the different stages of an experiment

[6] ***https://www.youtube.com/watch?v=DMfdMEA8e10***

SESSION NAME:	**Human Cycle of Water!**		
UNIT 2	LESSON 9 **October 14 th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CCL, CMCT**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 2 **Área III. Comunicación y representación de la realidad:** 3		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Oral expression in English: key vocabulary about an experiment's stages		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *B. Experimentación en el entorno. Curiosidad, pensamiento científico y creatividad* - Procesos y resultados **Área III. Comunicación y representación de la realidad** *C. Comunicación verbal oral. Comprensión-expresión-diálogo* - Verbalización de la secuencia de acciones en un experimento		
Lexis and grammar	- Experiment lexis: clear recipient, water, sponge, rock, feather, egg, flower, colorant - Grammar related to hypotheses: I think it will____ - Experiment stages lexis: think, write, experiment and observe		
Learning outcomes	Students will be able to: ⇒ Recognize which steps are necessary for carrying out an experiment ⇒ Name all elements necessary for the experiment ⇒ Formulate hypotheses and verify them when the experiment is done: *I think it will____*		

	⇒ Name the steps for an experiment: think, write, experiment, and observe		
Evaluation criteria (if necessary)	Correctly names all stages for an experiment Expresses their hypotheses with the given structure Correctly fills up the hypotheses sheet		
Materials	⇒ Clear recipients ⇒ Water ⇒ Colorants of different colors ⇒ Big clear recipient ⇒ Different materials ⇒ Hypotheses sheet (see annex 3.12.)	**Spaces**	⇒ Assembly area ⇒ *Experimenting with STEAM* corner
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
5 minutes	Warm-Up	Firstly, the language assistant will ask the students if they remember which steps were necessary in order to carry out an experiment.	Whole class
20 minutes	Speaking	After this, the teacher will ask the children to join her in the *Experimenting with STEAM* corner. She will tell the students about the water is trying to escape from recipient	Whole class, but individually

		to recipient, and that is our job to stop it. Then, the teacher will tell the students that she has thought about a way to know if the water is trying to escape. Altogether, the children will color each recipient's water with a different color thanks to colorants. After this, in turns, we will cut some paper tissue and place it as a bridge in between recipient and recipient. Before doing it, the language assistant will ask the students what they think it will happen. Then, all together, will watch how the paper turns into different colors and verify our initial hypotheses	
15 minutes	Science	After this experiment, all the children will move into another corner of the class, where a large recipient with water will be. Next to it, they will find different materials. Thanks to their hypotheses sheets (see annex 3.12), the students will have to guess if the element is going to float or if it will sink.	Whole class, but individually

		By turns, they will have to verify their hypotheses	
10 minutes	Speaking, wrap-up	After the last experiment, the students will have some time to compare their answers with their classmates.	Whole class

SESION 9.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

Tras esta sesión, en una de las clases de proyecto, los alumnos recordarán el experimento y narrarán las diferentes etapas en español, con el fin de que entiendan bien cuáles son sus nombres y en qué consiste cada una de ellas. A su vez, comentarán sus impresiones personales del experimento, para así reflexionar sobre lo aprendido.

SESSION 10 (October 17th): Research time

Summary: In this session, students will participate in different corners to know more about the number line

SESSION NAME:	**Research time**		
UNIT 2	LESSON 1 **October 17th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CMCT, CCL**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1 **Área III. Comunicación y representación de la realidad:** 2		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Comprehension and formulation of simple messages, questions, or simple orders in English		

Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *A. El entorno. Exploración de objetos, materiales y espacios* - Función de los números en la vida cotidiana - Conteo		
Grammar and lexis	- Spatial reference lexis: in front of-behind, right-left, up-down - Numbers up to 10		
Learning outcomes	Students will be able to: ⇒ Know how the number line works ⇒ Verbalize needed actions for a specific result ⇒ Understand how the programming robot works		
Evaluation criteria (if necessary)	Correctly fills up the number sheets Expresses the numbers up to 10 in English Participates in the activities Respects their peers' turn		
Materials	⇒ Robot Randy ⇒ Number's flashcards (see annex 3.13.) ⇒ Floor number lines ⇒ Number carpet (see annex 3.14.) ⇒ Number sheets (see annex 3.15.)	**Spaces**	⇒ Different corner set up in the classroom
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
10 minutes	Warm-Up	In the assembly area, the language assistant will bring out the number's flashcards up to 10 (see	Whole class

		annex 3.13.), and with the students, we will review their name in English. Also, we will play a song so we can sing along with the children[7]	
10 minutes	Corners	After this activity, the class will be divided in two different groups. Each group will go to one corner of the class and will rotate when the activity is done. In each corner, there would be one adult (teacher and language assistant)	In groups
15 minutes	Psychomotricity, speaking, writing	The first corner will be a combination of two activities. The name of the first activity is **Jumping through the number line!** There will be two floor number lines. By turns, each one of the children will have to go through all the number line on one leg, saying the numbers outload, as a relay race. The other activity's name is **How do you write it?** The	In teams, but individually

[7] *https://www.youtube.com/watch?v=DR-cfDsHCGA*

		students will have to pick a card from the pile and write the number and paint it (see annex 3.15.)	
15 minutes	Technology	The last corner will be **Programing with Robot Robbie**. There will be a floor's number carpet (see annex 3.14.), and the teacher will say a number outload. By turns, the students will have to determine which movements Robot Robbie will have to do and program it to reach the specific number	In teams, but individually

SESSION 11 (October 18th): 3,2,1… SCIENCE!

Summary: In this session, students will try to recuperate all numbers from the number line, by doing several psychomotricity activities

SESSION NAME:	**3,2,1… SCIENCE!**		
UNIT 2	LESSON 11 **October 18th**	GROUP 5ºA	DURATION: 50 minutes
FOCUS			
Key competences	**CP, CMCT, CCL**		
Specific competences	**Área I. Crecimiento en armonía:** 1 **Área II. Descubrimiento y exploración del entorno:** 1		

	Área III. Comunicación y representación de la realidad: 1, 3		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Interest in participating in oral interactions and daily communicative situations in English - Orders: one leg, both legs, arm with arm, big steps, small steps		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *A. El cuerpo y el control del mismo* - Referencias espaciales en relación con el propio cuerpo: delante-detrás, izquierda-derecha, arriba-abajo **Área II. Descubrimiento y exploración del entorno** - Conteo		
Grammar and lexis	- Spatial reference lexis: in front of-behind, right-left, up-down - Numbers up to 10 - Describing movements lexis: big step, small step, one leg, both legs, arm to arm		
Learning outcomes	Students will be able to: ⇒ Say the numbers from 1 to 10 in English and Spanish ⇒ Solve a task with the help of others ⇒ Situate themselves using specific words such as left or right, up and down…		
Materials	⇒ Psychomotricity materials: hoops, blocks, psychomotricity tunnel...	**Spaces**	⇒ Assembly area ⇒ Gym or playground
Procedures			
<u>Timing</u>	**<u>Stage/substage</u>**	**Activities**	**Grouping**

10 minutes	Warm-Up	The teacher will ask the students about the name of the different numbers, using the numbers' flashcards (see annex 3.13.)	Whole class
10 minutes	Psychomotricity	After this, the whole class will go to the playground, were there will be several psychomotricity elements such as hoops, a psychomotricity tunnel, blocks… The teacher will divide the class into four teams and tell them is their job to save the numbers from escaping, because the water is trying to steal them.	Whole class, divided into four teams
15 minutes	Psychomotricity	In the first task, the students will have to get across a line of hoops, one at a time, and following the teacher's commands, such as: ⇒ Jump with one leg	Whole class, divided into four teams

		⇒ Jump with both legs joint ⇒ Grab a partner by the arm and go together ⇒ Big steps ⇒ Small steps The orders will be provided in English, while the teacher exemplifies it. While the kids do it, they will have to do the name of the order.	
10 minutes	Psychomotricity	The next task will be going through the psychomotricity's tunnel, following the orders of the rest of students (up or down). After this, there will be a series of blocks, which they will have to jump	Whole class, divided into four teams
5 minutes	Mathematics	When recuperating all numbers, the team will have to put them in order and create their own number line	Whole class divided into four teams

SESSION 12 (October 19th): Musical scientific chairs

Summary: In this session, students will create their own rainstick and use it in the musical game chairs

SESSION NAME:	Musical scientific chairs		
UNIT 2	LESSON 1 **October 10th**	GROUP 5ºA	DURATION**:** 50 minutes
FOCUS			
Key competences	**CP, CMCT, CCL**		
Specific competences	**Área I. Crecimiento en armonía:** 4 **Área III. Comunicación y representación de la realidad:** 3,5		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Comprehension and formulation of basic messages, questions and simple orders		
Contents (other blocks and/or areas)	**Área I. Crecimiento en armonía** *D. Personas y emociones. La vida junto a los demás* - Juego simbólico **Área III. Comunicación y representación de la realidad** *G. Lenguaje y expresión plásticos y visuales* - Las técnicas básicas de la expresión plástica: manualidades y modelado		
Lexis and grammar	- Material lexis: tape, scissors, crayons, roll, rice - Water lexis: rain, rainstick, raindrop, rainfall		
Learning outcomes	Students will be able to: ⇒ Create their own rainsticks ⇒ Dance along the sound produced with their rainstick		

	⇒ Associate the rainstick with the element of water		
Materials	⇒ Empty carboard rolls ⇒ Rice ⇒ Clear tape ⇒ Colors	**Spaces**	⇒ *Craft Barn* corner ⇒ *Our office* space
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**
5 minutes	Warm-Up, Speaking	In the assembly area, the teacher will ask the students where the students could find water. Also, we will create a storm using our hands, following certain movements[8], as shown in the YouTube video	Whole class
5 minutes	Arts and Crafts, Speaking	The children will return into the *our office* area, where they will find several materials in their tables	Whole class
20 minutes	Arts and Crafts	The teacher will explain to the students that we're going to create a way of bringing rain with us everywhere we go. We will make a rainstick, which will be a cardboard tube with rice. While moving	Whole class, but individually

[8] *https://www.youtube.com/watch?v=5pkSQqPpNAY*

		it, the rice will do a sound that resembles rain. Firstly, all children will decorate their cardboard tube. When finished, they will fill it up with rice and the teacher will close it up with clear tape.	
15 minutes	Music	After this activity, we will gather all chairs and put apart the tables and play altogether a round of musical chairs, but with our rainsticks. One of the kids will be in the middle of the circle and will have to create a sound, for all the other children to move around the circle. When stopping, the rest of the children will have to find an empty chair.	Whole class
5 minutes	Wrap-Up	While playing a tidy-up song[9], all the students will help to clean up the classroom	Whole class

SESSION 13 (October 20th): Plants and water

Summary: In this session, students will find more about the parts of a plant and the function of water in its growth, by planting some seed in a recycled recipient.

[9] *https://www.youtube.com/watch?v=SFE0mMWbA-Y*

SESSION NAME:	Plants and water		
UNIT 2	LESSON 13 **October 20th**	GROUP 5ºA	DURATION: 50 minutes
FOCUS			
Key competences	**CP, CMCT, CCR**		
Specific competences	**Área II. Descubrimiento y exploración del entorno:** 1,3 **Área III. Comunicación y representación de la realidad:** 2		
Contents (EFL)	**Área III. Communication and representation of reality** *J. Foreign Language* - Comprehension of the general idea of small and simple texts in English		
Contents (other blocks and/or areas)	**Área II. Descubrimiento y exploración del entorno** *C. Indagación en el medio físico y natural. Cuidado, valoración y respeto* - Elementos naturales: agua y tierra Características, comportamientos y usos - Clasificación de los seres vivos y materia inerte		
Lexis and grammar	- Parts of the plant lexis: leaf, fruit, flower, branch, stem, seed, dirt		
Learning outcomes	Students will be able to: ⇒ Know how to draw a plant, with its basic parts ⇒ Create their own plants using recycled materials ⇒ Collaborate with others ⇒ Write the names of the part of a plant		
Evaluation criteria	Identifies the parts of the plant in their drawing Writes properly the name of the parts of the plant Recognizes how he/she has participated in the activity Uses the traffic light resource to symbolize their learning process		

Materials	⇒ Recycled yoghurt cups ⇒ Dirt ⇒ Flower seeds ⇒ Large piece of paper ⇒ Colors	**Spaces**	⇒ *Our office* area ⇒ *Craft barn* area ⇒ *Experimenting with STEAM* area
Procedures			
<u>Timing</u>	**<u>Stage/substage</u>**	**Activities**	**Grouping**
5 minutes	Warm Up	With the help of the language assistant and a drawing of a plant, the students will learn which parts a plant has, in the assembly area	Whole class
5 minutes	Music, speaking	After this, the students will dance and sing thanks to a small video about the parts of the plant[10]	Whole class
15 minutes	Arts and Crafts	The class will be divided into four teams. Each team will have a large piece of paper in which they will have to draw a big plant with its parts, writing them with the help of the language assistant	Whole class divided into four teams

[10] *https://www.youtube.com/watch?v=9bFU_wJgvBI*

20 minutes	Arts and Crafts, STEAM	While doing the prior activity, and by turns, the children will go to the *Experimenting with STEAM* corner to plant some seeds in recycled yoghurt cups, and decorate them as they like, one per kid.	Individually
5 minutes	Wrap-Up	The students will come by turns to the traffic light of emotions of the wall and place their finger depending on if they have or have not liked the activity	Individually

SESIÓN 13.1. REFUERZO DE VOCABULARIO (ESPAÑOL)

Tras la anterior sesión, los alumnos trabajarán las partes de la planta también en español gracias a los dibujos que han realizado y a través de un video de YouTube denominado "La planta y sus partes para niños"[11], el cuál la profesora irá parando cuando se mencione cada una de las partes de la planta. Cuando esto ocurra, los niños tendrán que decir el nombre en inglés y español de esa parte concreta de la planta.

SESSION 14 (October 21st): Does water disappear in STEAMland?

Summary: This session will be to reinforce all contents worked on this unit, by finishing our Unit 2 mural

[11] ***https://www.youtube.com/watch?v=wBjaQuyMr18***

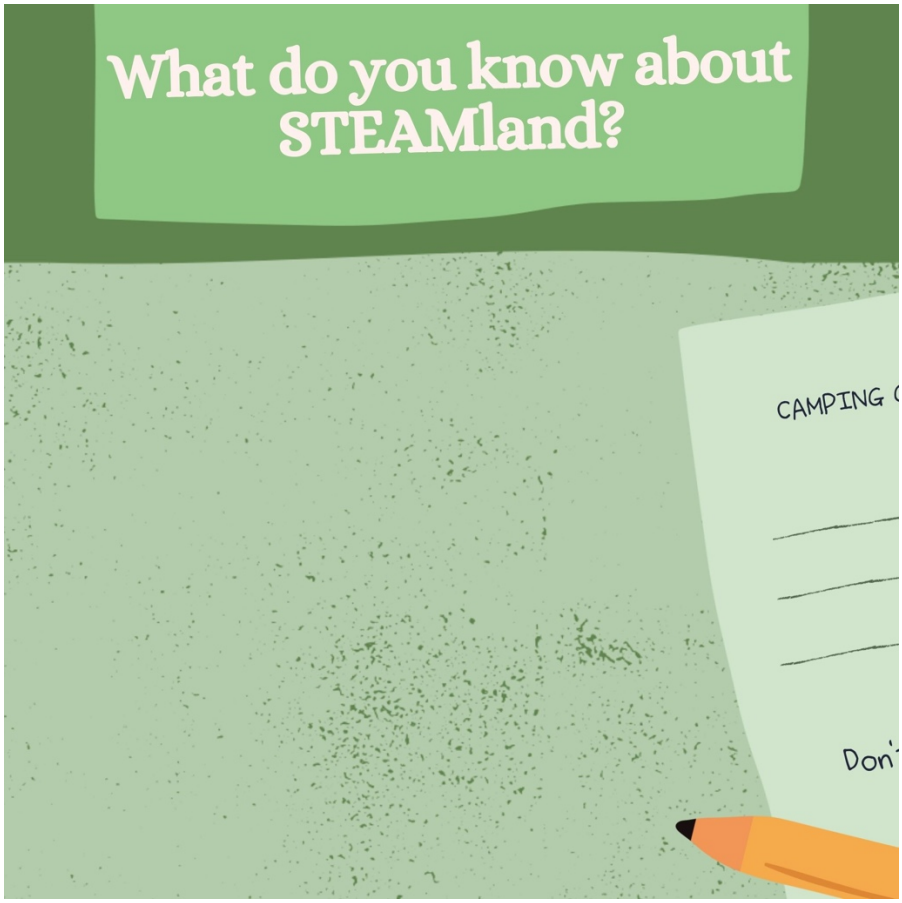
SESSION NAME:	Human Cycle of Water!		
UNIT 2	LESSON 1 **October 10th**	GROUP 5ºA	DURATION: 50 minutes
FOCUS			
Key competences	All competences specified in the unit		
Specific competences	All competences specified in the unit		
Contents (EFL)	All contents specified in the unit		
Contents (other blocks and/or areas)	All contents specified in the unit		
Lexis and grammar	All lexis and grammar specified in the unit		
Learning outcomes	Students will be able to: ⇒ Know the water cycle's stages and parts of the plant ⇒ Say the numbers up to 10 ⇒ Finish up the Unit 2 mural ⇒ Answer the question of the unit ⇒ Reflect on what they have learnt during the unit		
Evaluation criteria	Remembers which activities we have done over the unit Reflects their learning in the mural Identify key words related to the unit (Evaluation rubric- see annex 3.20)		
Materials	⇒ Materials used in all sessions	**Spaces**	⇒ Classroom
Procedures			
Timing	**Stage/substage**	**Activities**	**Grouping**

10 minutes	Warm Up	Children will go into the assembly area, where the teacher will ask them what they have learnt over this unit. We will recapitulate which experiments we have done, what activities we have liked…	Whole class
15 minutes	Arts and Crafts, speaking, reading, writing	After this, the teacher will take off the wall the Unit 2 mural and ask the students to add more things they find interesting: a drawing, a word…	Whole class
15 minutes	Music	When the mural is finished, the teacher will play some of the songs we have heard over the unit, and the children will have to sing along and dance	Whole class
10 minutes	Wrap-Up	The teacher will come to the assembly area with the students, and will talk about the question of the unit: does water disappear in STEAMland? Also, the teacher will ask the students if they have liked the unit and what they expect in further units	Whole class

ANNEX 3.3. Session 1 Images (Envelope)

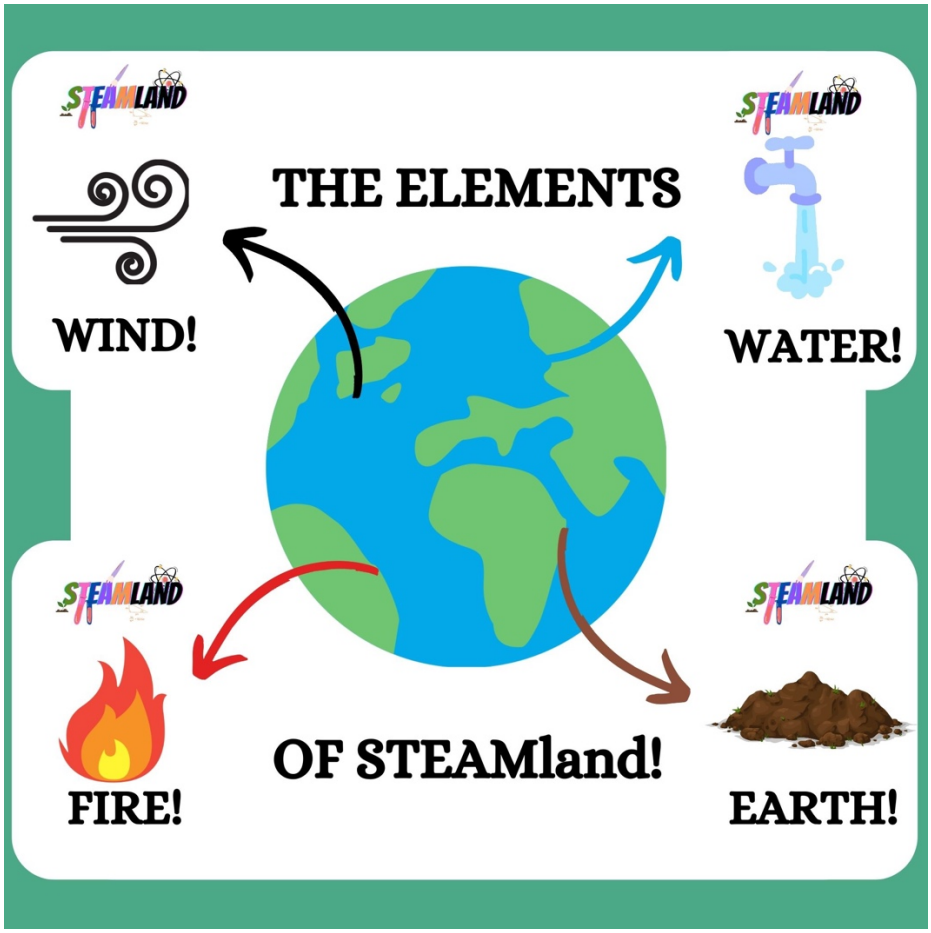
ANNEX 3.4. Unit 2 Storybook (in English)


Welcome to
STEAMland!
We hope you're having
a good time!


What do you know about
STEAMland?
CAMPING

Now that you know
what STEAMland is...
We need your help!!!!!

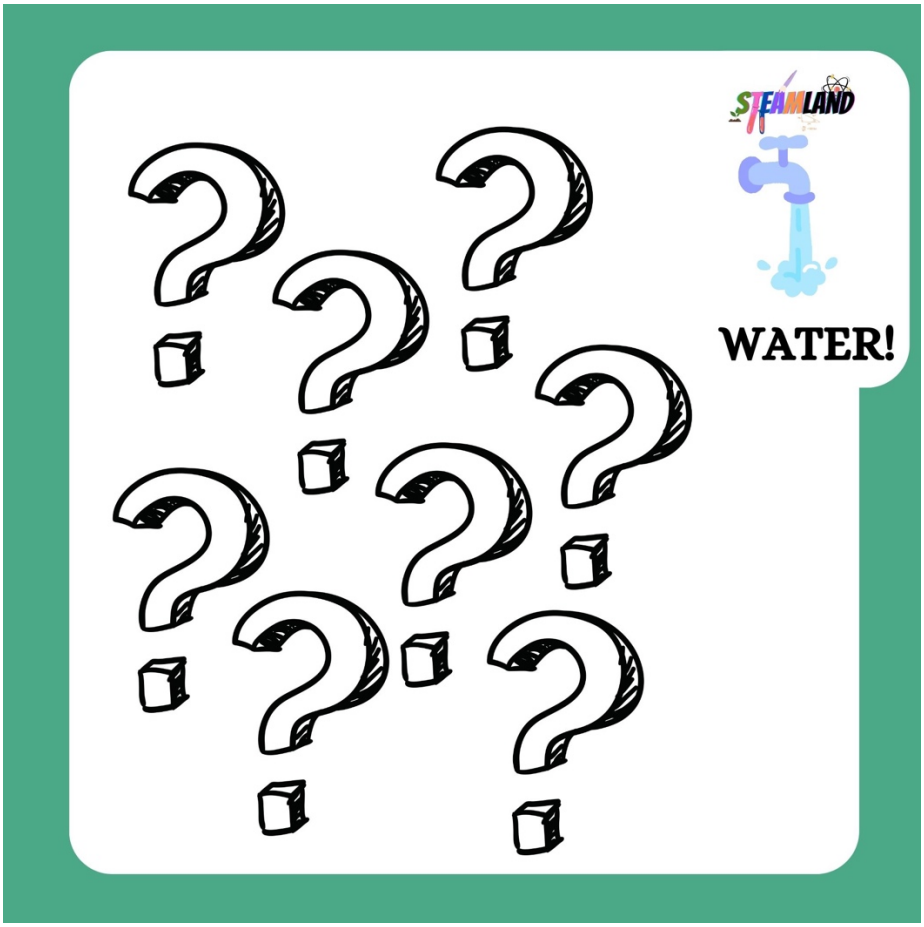
Do you recognize
these things?




WIND!
AIR
BREATH
BLOW


BURN
HOT
GLOOM
FIRE!


PLANT
DIRT
Canva
SEED
Canva
STEAMLAND
EARTH!

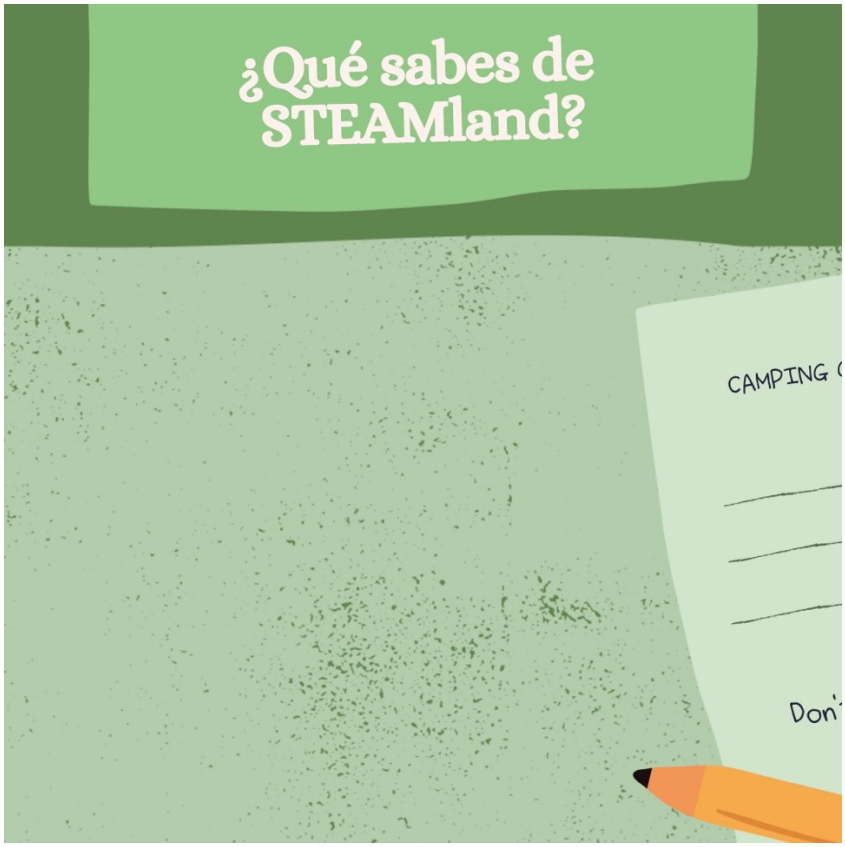

STEAMLAND
WATER!

BREAKING NEWS!!!!!!

The water is missing in STEAMland!
No one can find it, no one...

BUT YOU!!

ANNEX 3.5. Unit 2 Storybook (partially translated to Spanish)



Ahora que ya sabéis qué es STEAMland...
¡necesitamos vuestra ayuda!

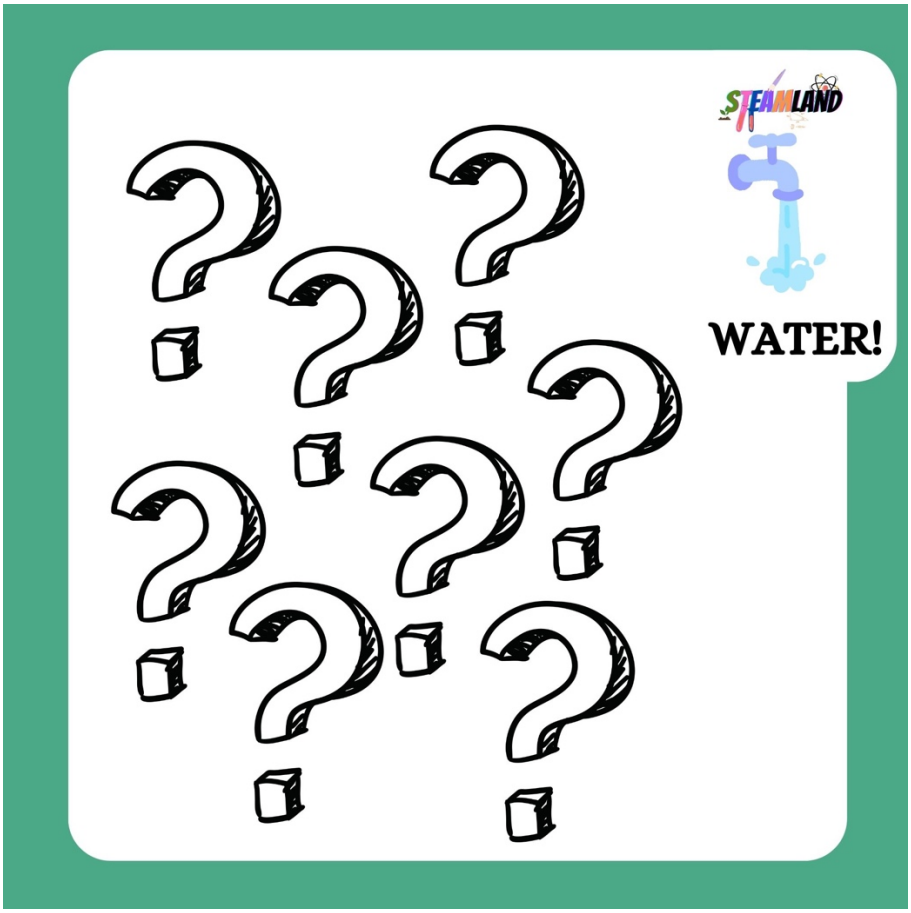
¿Reconoces estas cosas?


LOS ELEMENTOS
VIENTO
AGUA
DE STEAMland
FUEGO
TIERRA


VIENTO
AIRE
RESPIRAR
SOPLAR


QUEMAR
CALIENTE
GLOOM
FUEGO


PLANTA
TIERRA
SEMILLA
TIERRA


WATER!


¡ULTIMAS NOTICIAS!
Ha desaparecido todo el agua de STEAMland.
Nadie puede encontrarla, nadie...

ANNEX 3.6. Session 2 Elements' flashcards

Name: _____

STEAMLAND

RESEARCH: EXPERIMENT TIME!

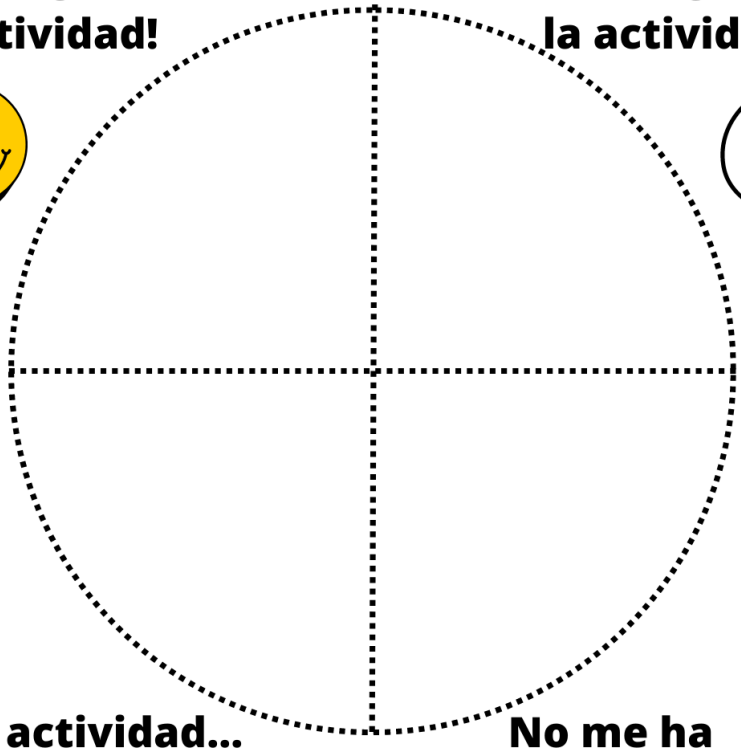
What **materials** do we need?

Name: _____

CYCLE OF WATER: AUTO EVALUACIÓN

¡Me ha gustado mucho la actividad!

Me ha gustado la actividad



La actividad... sin más

No me ha gustado la actividad

ANNEX 3.9. Session 7 Elements' Flashcards

ANNEX 3.10. Session 8 Water Riddle

Name: _____

WATER FOR…

WATER FOR _____

WATER FOR _____

WATER FOR _____

WATER FOR _____

ANNEX 3.12. Session 9 Hypotheses Sheets

HYPOTHESES

MATERIAL	FLOAT	SINK

ANNEX 3.13. Session 10 Number's Flashcards


5
FIVE


6
SIX

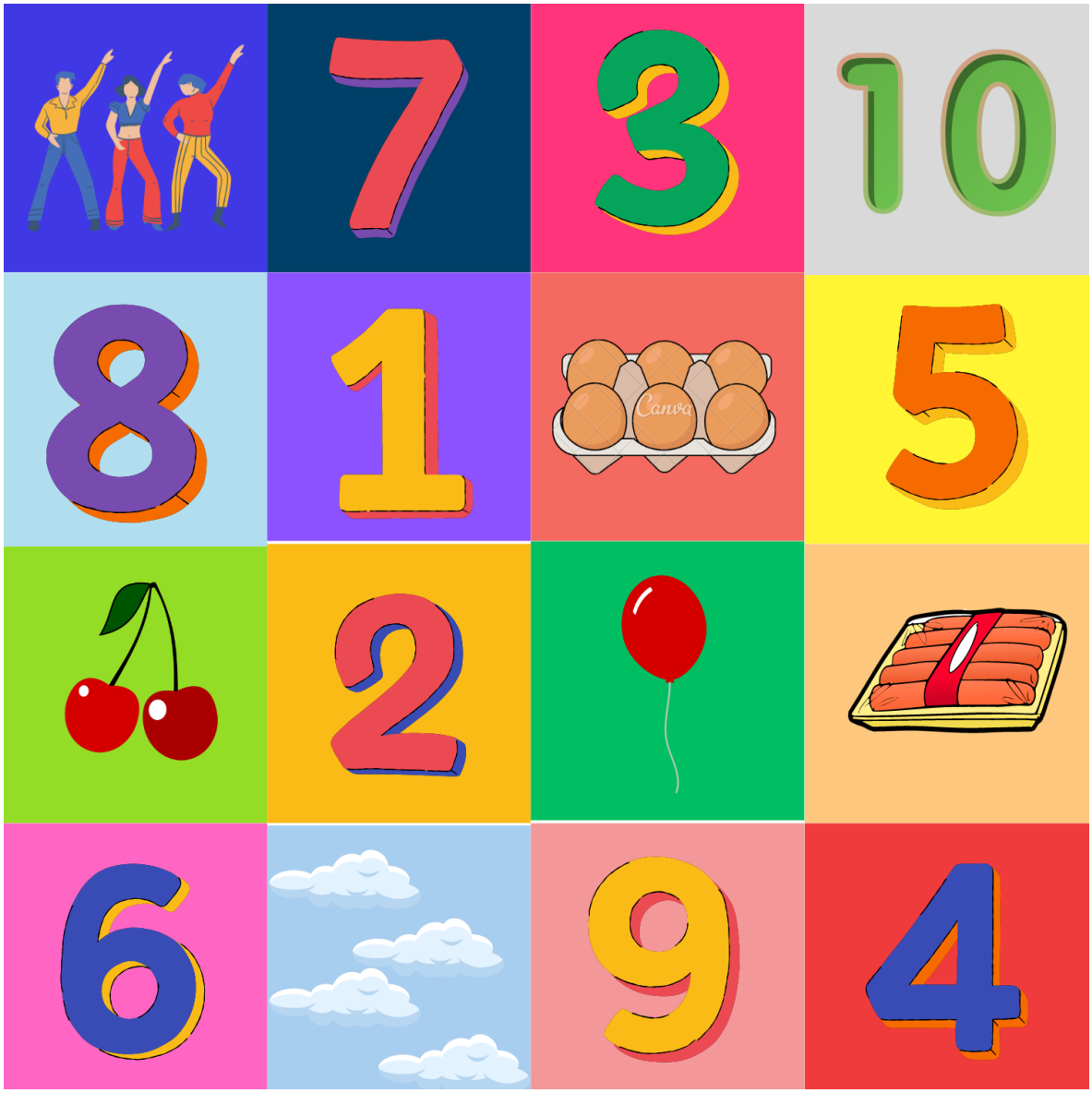

7
SEVEN


8
EIGHT


9
NINE


10
TEN

ANNEX 3.14. Session 10 Number Carpet



ANNEX 3.15. Session 10 Number Sheets

Name: _____

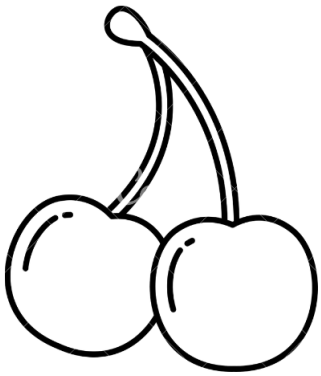
NUMBERS!

1 ONE

Name: _____

NUMBERS!

2 TWO



Name: _____

STEAMLAND

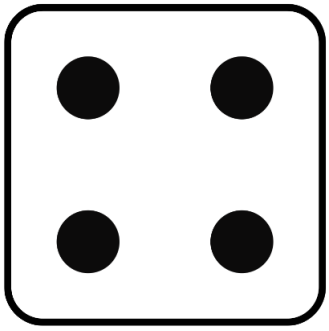
NUMBERS!

3 THREE

Name: _____

NUMBERS!

4 FOUR



Name: _____

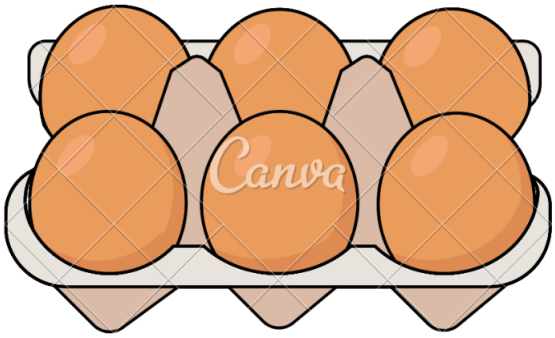
NUMBERS!

5 FIVE

Name: _____

NUMBERS!

6 SIX



Name: _____

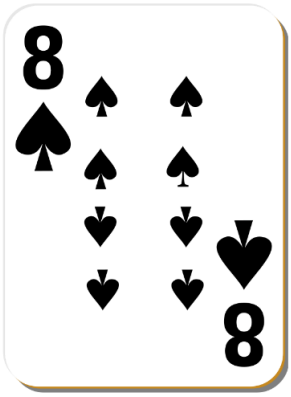
NUMBERS!

7 SEVEN

Name: _____

NUMBERS!

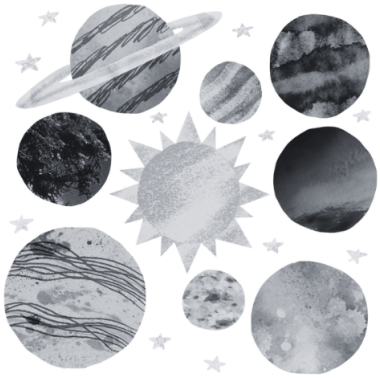
8 eight



Name: _____

NUMBERS!

9 NINE



ANNEX 3.16. Storytelling: Does water disappear in STEAMland?

PAGE 1.

Teacher: Good morning, children. Is everybody feeling well? *(Holding her thumb up)*

Children will answer with thumb up or thumb down

Teacher: Good! Today we are going to start a new unit called: Does water disappear in STEAMland? Do you know what water means?

Children will say what water means

Teacher: Okay! Do you know what disappear means?

Children will say what disappear no. If they don't know what it is, the teacher will do mimic so the students can guess it.

Teacher: Do you want to see what's inside?

Children: Yes!

Teacher: Okay then!

Teacher: Once upon a time, there was STEAMland: the land of science, technology, engineering, arts and mathematics *(pointing out each one of the letters).*

PAGE 2.

Teacher: Look! In this page, we can see all STEAMiers living peacefully! Look! They're talking to us: "Welcome to STEAMland! We hope you're having a good time!" Do you know what a good time is?

Children will say what good time means

PAGE 3.

Teacher: In this land, you can have real fun! Science is so fun; you just have to wait and see. Do you remember *(pointing her head with her finger)* anything about Unit 1?

Children will have to say what they remember about unit 1. When saying something, the teacher will repeat it and all children will have to repeat it afterwards

PAGE 4

Teacher: So, you know a lot of things about STEAMland! Now that you know what STEAMland is… We need your help!! Do you know what help is?

Children will say what danger is and some examples of it

Teacher: Perfect! In STEAMland, there are four main elements, that make STEAMland a magical place! Do you recognize these things?

Children will point out the images and, if they know, they'll say their name: WATER, EARTH, WIND AND FIRE

PAGE 5

Teacher: Good job! You know now what the elements of STEAMland are!

Altogether, the teacher will say one of the elements and do a specific movement with it: WIND, WATER, FIRE AND EARTH. The students will have to say the word and repeat the movement

PAGE 6

Teacher: Once upon a time, there was the WIND, blowing above everybody's heads. Thanks to the wind, the air could move from place to place, travelling long distances: from Spain to Australia, from Canada to Japan, from Madrid to New York! It blows, and blows, and blows… look, do you recognize this? *(Points out the dandelion).* It's a dandelion! Everybody, repeat, dandelion!

Children will repeat the word dandelion

Teacher: Have you ever seen *(points out her eye)* one?

Children will say yes or no

Teacher: If you find one, you can blow it (she blows an imaginary dandelion) and all seeds will go floating through the air. Everybody let's do it!

Children will blow their imaginary dandelion

Teacher: Perfect! Wind is everywhere. Thanks to the air, we can breathe *(points out the word)* in and out, in and out. Also, thanks to the wind, the windmill *(points out the windmill)* can work properly, so it can grind grains to obtain flour! Do you like the wind?

PAGE 7

Teacher: Once upon a time, there was the fire, hot, hot, hot! The red and orange fire burns, but be careful, not to be burnt! *(Points out the word burn).* The fire is very dangerous but, controlled, it can be very warm and cozy! The fire also has a special light called gloom! Everybody, repeat glooooom!

Children will repeat the word gloom

Teacher: We can fire in the fire bowl, in a match… and it's… hot, hot, hot! Do you like fire?

PAGE 8

Teacher: Once upon a time, there was the earth, below everybody's feet! Where are your feet?

Children will step with their feet.

Teacher: Very good! Earth is very important for us, because it allows plants to grow! Thanks to the seeds, which are baby plants, and the water, the plants can grow, grow, grow! They're planted in the dirt, which is a type of earth! And they grow, grow, grow!

PAGE 9

Teacher: But where is the water? Where? Everybody let's call the water!

Children will repeat the word water

PAGE 10.

Teacher: Oh, no! BREAKING NEWS: The water is missing; nobody knows where it is. Let's call it one more time

Children will repeat the word water

Teacher: No one can find it, no one… but you!!!!!! Do you think we can find the water?

Children will say yes!!!

ANNEX 3.17. TIMETABLE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:30-10:20	ASSEMBLY	ASSEMBLY	ASSEMBLY	ASSEMBLY	ASSEMBLY
10:20-11:00	TECNOLOGÍA	MUSIC	PSICOMOTRICIDAD	RELIGION	TRABAJO
11:00-11:30	***RECESS***				
11:30-12:20	**STEAMland**	PROYECTO	TRABAJO	***STEAMland***	MUSIC
12:20-14:00	***LUNCH TIME!***				
14:00-14:50	PROYECTO	TRABAJO	**STEAMland**	PSICOMOTRICIDAD	**STEAMland**
14:50-15:40	TRABAJO	***STEAMland***	JUEGO LIBRE	PROYECTO	JUEGO LIBRE
15:40-16:00	***RECOGIDA***				

ANNEX 3.18. Specific competences (subtracted from BOCM 36/2022)

Área I. Crecimiento en armonía

1. Progresar en el conocimiento y control de su cuerpo y en la adquisición de distintas estrategias, adecuando sus acciones a la realidad del entorno de una manera segura, para construir su imagen.
2. Reconocer, manifestar y regular sus emociones expresando necesidades y sentimientos para lograr una seguridad emocional y afectiva.
3.Adoptar modelos, normas y hábitos, desarrollando la confianza en sus posibilidades, para promover un estilo de vida saludable y responsable.
4. Establecer interacciones sociales para construir su identidad y personalidad en libertad, valorando la importancia de la amistad, el respeto y la empatía.

Área II. Descubrimiento y exploración del entorno

1. Identificar las características de materiales, objetos y establecer relaciones entre ellos, mediante la exploración, la manipulación sensorial, el manejo de herramientas sencillas y el desarrollo de destrezas lógico-matemáticas.
2. Desarrollar, los procedimientos del método científico, a través de procesos de observación y manipulación de objetos, para iniciarse en la interpretación del entorno y responder a las situaciones y retos que se plantean.
3. Reconocer elementos y fenómenos de la naturaleza, mostrando interés por los hábitos que inciden sobre ella, para apreciar la importancia del cuidado y conservación del entorno.

Área III. Comunicación y representación de la realidad

1. Manifestar interés por interactuar en situaciones cotidianas y el uso de su repertorio comunicativo, para expresar sus necesidades e intenciones.
2. Interpretar y comprender mensajes y representaciones apoyándose en conocimientos y recursos de su propia experiencia para responder a las demandas del entorno.
3. Producir mensajes de manera eficaz, personal y creativa utilizando diferentes lenguajes, descubriendo los códigos de cada uno de ellos.
4. Participar por iniciativa propia en actividades relacionadas con textos escritos, mostrando interés y curiosidad

5. Valorar las diferentes lenguas presentes en su entorno, así como manifestaciones culturales

ANNEX 3.19. Evaluation Criteria (substracted from BOCM 36/2022)

Área I. Crecimiento en armonía

1.1. Progresar en el conocimiento de su cuerpo ajustando acciones y reacciones y desarrollando el equilibrio, la percepción sensorial y la coordinación en el movimiento

1.2. Manifestar sentimientos de seguridad personas en la participación en juegos y en las diversas situaciones de la vida cotidiana, confianza en las propias posibilidades y mostrando iniciativa

1.3. Manejar diferentes objetos, útiles y herramientas en el juego y en la realización de tareas cotidianas, mostrando un control progresivo y de coordinación de movimientos de carácter fino

1.4. Participar en juegos organizados o espontáneos con curiosidad y divirtiéndose

2.1. Identificar y expresar sus necesidades y sentimientos ajustando el control de sus emociones.

2.2. Ofrecer y pedir ayuda en situaciones cotidianas, valorando los beneficios de la cooperación y la ayuda

2.3. Expresar inquietudes, gustos y preferencias, con entusiasmo y respeto, mostrando satisfacción y seguridad sobre los logros conseguidos

3.1. Realizar actividades relacionas con el cuidado de uno mismo, con el cuidado del entorno y con actitud de respeto

3.2. Respetar la secuencia asociada a los acontecimientos y actividades cotidianas, adaptándose a las rutinas establecidas para el grupo y desarrollando comportamiento respetuosos hacía los demás.

4.1. Participar con iniciativa en juegos y actividades ´relacionándose con otras personas con actitudes de afecto, empatía, generosidad y amor al prójimo, respetando los distintos ritmos individuales y evitando todo tipo de discriminación

4.2. Reproducir conductas, acciones o situaciones a través del juego simbólico en interacción con sus compañeros

4.3. Participar activamente en actividades relacionadas con la reflexión sobre las normas sociales que regulan la convivencia y promueven valores como el respeto hacia los demás

4.4. Desarrollar destrezas y habilidades para la gestión de conflictos de forma positiva, aprendiendo a buscar la verdad, a no mentir, a defender a quien lo necesite y a no tener miedo. Además proponer alternativas creativas y teniendo en cuenta el criterio de otras personas

4.5. Participar, desde una actitud de respeto, en actividades relacionadas con costumbres presentes en su entorno, mostrando interés por conocerlas.

Área II. Descubrimiento y exploración del entorno

1.1. Establecer distintas relaciones entre los objetos a partir de unas cualidades o atributos, mostrando curiosidad e interés.

1.2. Emplear los cuantificadores básicos más significativos en el contexto del juego y en las relaciones con los demás

1.3. Ubicarse adecuadamente en los espacios habituales, tanto en reposo como en movimiento, aplicando sus conocimientos acerca de las nociones espaciales básicas y jugando con el propio cuerpo y con objetos.

1.4. Identificar las situaciones cotidianas en las que es preciso medir, utilizando el cuerpo u otros materiales y herramientas para efectuar las medidas

1.5. Organizar su actividad, ordenando las secuencias y utilizando las nociones temporales básicas

1.6. Utilizar nociones temporales básicas para investigar sobre el paso del tiempo y descubrir algunos hechos del pasado

2.1. Gestionar situaciones, dificultades, retos o problemas mediante la planificación de secuencia de actividades, la manifestación de interés e iniciativa y el trabajo con sus compañeros.

2.2. Canalizar la frustración antes las dificultades o problemas mediante la aplicación de distintas estrategias

2.3. Plantear ideas acerca del comportamiento de ciertos elementos o materiales, comprobándolas a través de la manipulación y la actuación sobre ellos

2.4. Utilizar distintas estrategias para la toma de decisiones de manera autónoma, afrontando el proceso de creación de soluciones en respuesta a los retos que se planteen

2.5. Programar secuencias de acciones o instrucciones para la resolución de tareas analógicas y digitales.

2.6. Participar en proyectos utilizando dinámicas de grupo, compartiendo y valorando opiniones propias y ajenas, expresando conclusiones personales a partir de ellas.

3.1. Mostrar una actitud de respeto, cuidado y protección hacía el medio natural y los animales, identificando el impacto de algunas acciones humanas.

3.2. Identificar rasgos comunes y diferentes entre seres vivos e inertes

3.3. Establecer relaciones entre el medio natural y social a partir del conocimiento y observación de algunos fenómenos naturales y de los elementos patrimoniales presentes en el medio físico

3.4. Identificar rasgos del entorno próximo, reconocer algunas señas de identidad cultural, física y social de la Comunidad de Madrid y de España

3.5. Participar en actividades sociales y culturales de la Comunidad de Madrid y de España

Área III. Comunicación y representación de la realidad

1.1. Utilizar la lengua oral para establecer una interacción con sus compañeros y con los adultos

1.2. Establecer comunicación con los demás utilizando el lenguaje gestual y sencillas dramatizaciones

1.3. Expresar y comunicar emociones, necesidades, sentimientos y vivencias, utilizando estrategias comunicativas y aprovechando las posibilidades que ofrecen los diferentes lenguajes

1.4. Manifestar respeto hacía las intervenciones de los demás

1.5. Mostrar interés y curiosidad hacia las diferentes lenguas

2.1. Adecuar la conducta en función de los estímulos y mensajes del entorno

2.2. Valorar la importancia de las distintas representaciones y manifestaciones artísticas y culturales, y expresar sensaciones, sentimientos y emociones que producen

3.1. Explorar las posibilidades expresivas de los diferentes lenguajes (corporal, gestual, verbal, artístico), utilizando los medios materiales propios de los mismos para expresar sensaciones y sentimientos

3.2. Ampliar y enriquecer su repertorio comunicativo con seguridad y confianza

4.1. Participar en situaciones cotidianas que propicien una aproximación al lenguaje escrito

4.2. Incorporar a sus producciones con intención comunicativa, escrituras indeterminadas, espontáneas y no convencionales

5.1. Mostrar respeto e interés por la variedad lingüística y cultural del aula

5.2. Manifestar interés y disfrute hacia actividades relacionadas con literatura infantil, obras musicales, audiovisuales, danzas o dramatizaciones

ANNEX 3.20. Evaluation Rubric (specific for Unit 2)

Criterios	Conseguido	En proceso	No conseguido	Observaciones
Reconoce y utiliza el vocabulario concreto de los elementos				
Reconoce y utiliza el vocabulario concreto de las partes de la planta				
Reconoce y utiliza el vocabulario concreto de los números				
Reconoce u utiliza el vocabulario concreto de las referencias temporales				
Reconoce y utiliza el vocabulario concreto de las referencias espaciales				
Participa en la narración de historias de manera activa				
Reconoce las etapas de un experimento				
Formula hipótesis siguiendo la estructura: I think it will___				
Reconoce las partes del ciclo de agua				
Expresa ideas y conceptos a través del dibujo				
Colabora con otros de manera adecuada				
Participa activamente en las actividades propuestas				
Respeta los turnos de palabra en la asamblea				
Pregunta las dudas, tanto a la profesora como a la asistente				
Investiga activamente en los experimentos				

Sigue instrucciones adecuadamente en la elaboración de manualidades				
Participa en el baile y canto en canciones de manera grupal				

ANNEX 3.21. Teacher Self-Evaluation

Criterio	**Calificación**	**Comentarios**
He tenido las sesiones preparadas de antemano.		
En todas o la mayoría de las sesiones, ha dado tiempo a hacer todas o la mayoría de las actividades.		
El espacio ha estado organizado durante la sesión.		
Me he adaptado a los cambios o imprevistos de cada día.		
He cumplido mis objetivos diarios.		
He cumplido mis objetivos de unidad didáctica.		
He cumplido mis objetivos de proyecto.		
He obtenido información de evaluación de todos los alumnos durante la unidad didáctica.		
He tenido en cuenta las necesidades específicas de cada alumno en las sesiones.		
He gestionado bien el tiempo de las sesiones.		
He dado feedback inmediato al alumnado a lo largo de la unidad didáctica.		

ANNEX 3.22. Students self-evaluation tools

Name: _____

STEAMLAND

SELF-EVALUATION

I DID MY WORK 			
I LISTENED TO THE TEACHER 			
I WORKED WITH OTHERS 			
I ASKED FOR HELP 			
I HAD FUN