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TRABAJO DE FIN DE GRADO

ICTs and Gamification in the English classroom

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Educating the mind without educating the heart is no education at all.

Aristotle

RESUMEN

Este Trabajo Fin de Grado (TFG) se centra en la investigación de recursos de una metodología nueva, la gamificación, en el ámbito educativo. Del mismo modo, este trabajo también abarca un planteamiento práctico donde la lengua inglesa es el instrumento transmisor de contenidos en las asignaturas de Ciencias Sociales, Ciencias de la Naturaleza y Educación Plástica. Esta propuesta va dirigida a 3º de Educación Primaria y está compuesta por diez sesiones por asignatura, en las que se utilizarán principalmente dos aplicaciones, ClassDojo y ClassCraft. Gracias a los cuales los alumnos podrán conocer todos los contenidos que se trabajan. Por último, se incluye una propuesta de evaluación por parte del profesor y por parte del estudiante.

Palabras Clave: Gamificación, instrumento transmisor, propuesta, contenidos, evaluación, TIC, metodologías activas.

ABSTRACT

This Final Degree Project, I focus on the investigation of gamification resources, in the educational field. In the same way, this project also includes a practical approach in which the English language is the used to teach subjects such as Social Sciences, Natural Sciences as well as Arts and Crafts. This proposal is aimed at 3rd Year of Primary Education and is composed of ten lessons per subject, also by two main applications, ClassDojo and ClassCraft. Thanks to students will be able to discover all the contents that are worked on. Finally, a student and a teacher evaluation proposal is included.

Keywords: Gamification, transmitting instrument, proposal, content, evaluation, ICTs, active methodologies.

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1. INTRODUCTION

Society has been transforming over the years, and this leads to the introduction of new methodologies. Educational methodologies and techniques that were useful and effective in the past have no place in current society, so it is necessary to introduce changes. Changes that do not necessarily have to generate large variations, since many of the methodologies that are beginning to be used, such as the active methodologies, in their bases they have great similarities with the New School.

A movement for pedagogical renewal that emerged at the end of the 19th century in order to create a whole set of principles whose common factors are all those opposed to the ideas followed until that moment. From these principles, numerous methodologies have been created, such as the methodologies active, which are nothing more than those that understand learning as a constructive and non-receptive process on the part of the students.

With active methodologies, one-way transmission is not used anymore, where the teacher is in charge of transmitting all the information to the students, that is, the teacher is not a mere transmitter of knowledge. The student is the protagonist of their own learning, a learning in which peers also play an important role; the student body does not have a passive role.

In the following project, I will focus on a specific active methodology which is gamification. With this teaching-learning approach, it is not only intended that Primary Education students acquire knowledge, but also that students develop skills, attitudes and skills to solve real problems and examples that affect and are found in their daily lives. Motivation is a fundamental element that will help to work on everything mentioned so far and, for this, real world will be brought into the classroom through games and technologies.

The teaching of the English language is, on many occasions, boring and unattractive for students, so in this project we will use gamification with the technological resources of the classroom to create a practical proposal that motivates students to approach the English language. The subjects covered are Natural Sciences, Social Sciences and Arts and Crafts.

For the development of the following work we will begin by contextualizing the transformation of the school up until today and the changes it has undergone, the term of active methodologies and the different ways of working that are included within this didactic system.

Next, we will make an introduction to a more specific methodology within the active methodologies, in this case gamification. We will also justify the importance of applications in current schools and the technological resources on which it will be based.

Finally, after its theoretical contextualization, we will present a practical proposal in which all the theoretical aspects previously mentioned are combined, carrying out a reflection that will help to obtain conclusions from both theoretical framework and the didactic proposal.

2. JUSTIFICATION AND OBJECTIVES

The project's main objective regarding the present law "ROYAL DECREE 26/2016, 21st June, establishing the curriculum and regulating the implementation, evaluation and development of Primary Education in the Community of Castilla y León" is to use information and communication technologies (henceforth ICT) to facilitate the individualization of teaching and improve attention to student diversity. Nowadays it is essential to take into account the importance of our environment and show our students all of the resources which we can use to learn new things; we can support this learning with the ICTs resources.

The reason for carrying out this research work is to demonstrate that there are significant changes in education and the teaching-learning process. It is important to know that the English language is considered one of the most spoken in the world, therefore, this subject is taught on a compulsory basis in all educational centers.

Improving the communicative competence in a foreign language is a requirement of current society that, hand in hand with the evolution of ICT tools, meeting the demands of a globalized world. This new society demands students who are able to function in a multicultural and multilingual context, hallmarks of the present and future society in which they will live. The current school must assume these demands and respond to them, training students to live in an environment characterized by mobility.

First, the learning material must have a meaning itself, that is, its various parts must be related to certain logic; secondly, the material is potentially significant for the student, that is, that it has even ideas in its structure of knowledge with which the material can be related. To achieve the learning of a new concept, according to Ausubel (1963), it is necessary to build a cognitive bridge between that new concept and some more general ideas already present in the student's mind.

The teaching-learning process of the English language must be based on participatory activities that require reflection and interaction, individually or collectively, between theoretical and practical approaches. In this sense, ICT tools should play a fundamental role, to search for information, to process and present it, to carry out interactive simulations and represent phenomena of difficult experimental realization. Considering this information, the following objectives will be set for this project:

- To control and supervise the monitoring of the educational process and in particular the teaching-learning process through the mastery of ICT and the necessary strategies.
- To relate theory and practice with the reality of the classroom and in the center.
- To participate in the teaching activity and learn how to do, act and reflect from practice, taking into account the methodology implemented.
- To make an ethical use of ICT tools and be aware of this, and learn about some applications and their uses in the classroom.
- To reach conclusions in each activity and learn how and when we can use each activity and which applications is the most adequate.
- To improve the teaching-learning process with some gamification activities in the classroom
- Develop English speaking in the classroom through gamification.
- Develop the objectives present in the curriculum through games and technologies.
- Introduce active methodologies in the classroom to improve student learning.

Objectives according to the degree:

- Design, plan and evaluate teaching-learning processes, both individually and in collaboration with other teachers and professionals at the centre.

- Design, plan, adapt and evaluate teaching-learning processes for students with specific educational needs, in collaboration with other teachers and professionals at the centre.
- Design and regulate learning spaces in contexts of diversity and that attend to gender equality, equity and respect for human rights that shape the values of civic education.
- Know and apply ICTs in the classroom. Selectively discern audiovisual information that contributes to learning, civic training and cultural wealth.

3. THEORETICAL FRAMEWORK

In this section, it is important to talk about methodologies and traditional pedagogical ideas and their characteristics and how they have evolved during the years to education better. It is important to be aware of old routines and all the properties which the teachers were doing during the years to explain the new methodologies, especially focusing on gamification. I am going to focus on the foreign subject, which methodologies have, activities, routines to develop a second language. How the technology was included in the classroom and the different uses of that in a pedagogical way. After this, we can focus on gamification and analyze this methodology. Develop the link between gamification and the English language, as well as the study of this methodology as an attractive method for the teacher and children, and how we can combine technology and games with the English language. It is important to highlight the meaning of ICT, which are essential resources to develop this methodology.

3.1. The change of the school until today

The New School, is an educational approach developed in the early 19th century but it was fully developed at the beginning of the 20th century. This approach is oriented towards the criticism of the predominant traditional and authoritarian school of this time characterized by being teacher –centered, i.e. students assumed a passive role during the learning (García Jiménez, 2009). The traditional school does not take into account the individual needs of the students, contra wise; the same methodology is valid for all the students to work on all the subjects of the curriculum. This entails a great demotivation for students and requires putting aside the ability to reason to focus exclusively on rote learning.

In recent years, most of us have begun to recognize the importance of the teacher as well as to pay more attention to staff development. However overall, we did it in a limited and even wrong way (Fullan, 1990, 1991; Little, 1990). Indeed, many of our proposals for staff development are part of the problem of change more than one solution to this (Casanova, 2009). Many staff development strategies have been so fragmented, as alien and indifferent to the true needs and interests of teachers as the same innovation strategies which they intended to complement or supplant.

The role of the teacher changes with the New School, as they start considering the interests and needs of children, something that will help to develop their autonomy and critical thinking (Pekka, 2019). With this, we try to acquire a series of knowledge, as well as work on the necessary skills to interact with the environment inside and outside the classroom. Create an environment where students can interact with each other and learn at the same time is essential for the teaching-learning process. They have to investigate and discover things, then they have too many ICT tools to learn more about the topics. The idea is to link daily life and real examples with a theoretical part in which children will interiorize easily.

These new School proposes some changes to update the traditional education to which the society was accustomed. Despite that these pillars do not include all the principles on which achieve methodologies are based, It is a great starting point. That is why the teacher must research into new methodologies and resources to work with the children actively, in this case, gamification is one of the newest methodologies which some teachers have implemented in the classroom because children find it attractive and motivating. The idea of this methodology is for children to have an active role and to explore by themselves playing with the topic to arrive at the main objective in each activity or game. Children are the protagonists of the learning process, all we need is to have some resources which make the theory more attractive to them (Pekka, 2019).

3.2. Methodologies and their improvement through technology

Web 1.0 is the most basic form of text-only browsers. It appeared in 1990s and is very primitive for what the web offers today. The web 1.0 is used by people connected to the web using the Internet and is a taxable person who receives the information or the public, without there being any possibilities for the interaction with the page content.

According to Latorre (2018), In Web 1.0, web pages are limited to displaying information which is not even updated is part of the 1.0 generation. On the other hand, when the pages offer a considerable level of interaction and are updated with the contributions of users, considered to belong to Web 2.0. In this sense, traditional learning settings can be related to Web 1.0, where users are passive, just as students in the classroom, while Web 2.0 is connected to current learning settings, where students acquire an active role as users do in Web 2.0. Consequently, the inclusion of Web 2.0 resources in the classroom must favor the active role of the student.

We are going to focus on active methodologies, where children are the most important. Moreover, the Internet is available for everyone, but there is one important aspect about ICT tools, it is just another resource to include in the classroom. Consequently, it should not be used to praise students and education should not revolve around technology, but it should be included as it is part of our student's reality (Gómez Ventura, 2019).

That is why this project is going to be focused on the gamification technique. The most important thing of implementing gamification is that the relationship between the teacher and children must be trustworthy. Teachers must decide which are the best ICT tools to apply with their students considering that they should allow an active role to the student and the mediator role to the teacher.

In modern society, we are experiencing a kind of technological revolution which is approaching too fast, and nowadays children grow up in a digital age. It seems obvious that technology cannot be excluded for education as it is part of our students lives as well as their development as effective citizens in a world which requires a well-developed digital competence. According to Murillo, despite the fact that the current educational system is characterized by presenting the knowledge of a partial form, the students, on numerous occasions, have difficulties to extrapolate what was learned in school to reality, since it is not presented as something fragmented, but as a set for which the learned skills should be used not only in a specific discipline (Murillo, 2007).

Today's society is characterized by the increasing use of new ICTs, requiring its citizens a series of personal, social and professional skills to face the changes imposed in the fields of science and technology. Accordingly, this is why a teacher must be digitally competent when implementing new methodologies which require the digitization of some activities.

As a result of this changing world, we find ourselves with an educational system which places its teachers at the centre of attention since they are considered the basic pillar of change.

Therefore, it is our obligation not to allow schools to be the last places to incorporate the discoveries that new technologies bring to us.

According to Rubio (2019), teachers are introducing themselves to the use of new technologies step by step to promote the development of an intercultural and relevant teaching-learning process. Our centres have evolved towards a multicultural context to deepen this intercultural root that favours the full integration of new technologies as key learning tools. As a result, the role of teachers has undergone great changes in recent years. Today they are not only supposed to teach but are also supposed to help students learn to learn. Information is available to everyone and accessible to everyone. And to successfully handle this revolution, teachers need ongoing professional development. In the 21st century, some of the innumerable tasks that educators must undertake are the following: understand the different learning styles, design and organize classes, establish and undertake objectives, motivate students and encourage participation, develop learning based on the learner, to help learners to be able to use different resources and sources, to encourage self-learning and self-assessment, and to do research both inside and outside the classroom.

It is also important to note that it is a common and general belief that learning to teach is a lifetime experience. Therefore, teachers are supposed to experiment in the classroom to be able to develop new teaching strategies and new ways of using both materials and resources, mainly technology. Increasingly, teachers are being asked to develop a research profile and understand the relationship between the theory of foreign language learning and the design of materials and sessions in an attractive way for students.

The use of ICTs in the foreign language classroom is a resource which motivates students, completes the teaching process, stimulates open discussions, and helps to share stories among students (Rubio, 2019).

We can use ICT tools with our students in the classroom in different ways such as using commercially developed language programs or web activities, assigning specific final assignments, asking students to search for information, or encouraging students to communicate with other students via social networks. Besides, ICT tools offer a lot of advantages such as the ones listed below:

- Repetition of activities
- Individual and collaborative work
- Motivation and entertainment
- Learning from mistakes
- Acquisition of technological skills
- Interactivity
- Multimedia (To practice listening, reading, speaking or writing)
- Authenticity

3.3. Gamification

According to Kiryakova (2013) motivation and engagement are usually considered prerequisites for the completion of a task or encouragement of a specific behavior. In education, and most importantly, they are use to distracting with technologies such as smartphones and the Internet, since they have an easy reach for most of the population. In today's digital generation gamification has become a popular tool to encourage specific behaviours, and increase motivation and engagement (Pekka, 2019).

As Pekka said we have to create our work in an environment where children can discover and learn new thing using technologies. "You create these communities around the game that do an incredible amount of intellectual work, and when they're done with the work, they will leave the game and go to another game that's more challenging. Can you imagine if we had that kind of environment in classrooms?" (Pekka, 2019 p.6).

"Today's learners are digital natives and have a new profile. They grew up with digital technologies and have different learning styles, new attitude to the learning process and higher requirements for teaching and learning. Teachers are facing new challenges and have to solve important issues related to the adaptation of the learning process towards students' needs, preferences and requirements" (Kiryakova, Angelova & Yordanova, 2013).

Gamification is an integration of game elements and game thinking in activities that are not games. According to Kapp gamification is “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.” (Kapp, 2012 p.11) Gamification is the use of game thinking, approaches and elements in a context different from the games. The use of game mechanics and game properties improves motivation and learning in formal and informal conditions. Various definitions overlap and can be summarized as follows:

According to Gabe Zichermann, cited by (Giang, 2013), “The use of game mechanics improves the abilities to learn new skills by 40%”. Game approaches lead to a higher level of commitment and motivation of users to activities and processes in which they are involved. Game mechanics are familiar to consumers as most of them have played or continue to play different games. Although this conclusion applies to companies and their employees, it is unconditionally true for education. Gamification is not directly associated with knowledge and skills. Gamification affects students’ behaviour, commitment and motivation, which can lead to improvement of knowledge and skills (Hsin-Yuan Huang, Soman, 2013).

In order to develop a gamification activity, the following steps that lots of authors coincide must be followed:

Table 1. Steps of gamification



- *Understanding the target audience and the context:* A key factor which determines the success of an education program is a good understanding of who the student is. This combined with the context in which the program is being delivered will help in designing a program which empowers the student to achieve the objective of the program. While an analysis of the target audience will help you determine factors like age group, learning abilities, current skill-set and others. Analyzing the context can provide details of the student group size, environment, sequencing of skills, and the time frame The consideration of children’s the children abilities, strong, weak, feelings and pleasures to design a good gamification activity as the main objective of teaching what is desired.

A pain point is defined as a factor that prevents a student from advancing through the learning program and/or achieving the objectives. Pain points can differ depending on the student's age, background, or the field they are in.

- *Defining learning objectives:* Every instructor should have an objective for students to achieve at the end of the learning program. This could include the following aspects:
 - General Instructional Goals i.e. students must complete an assignment, exam, test, quiz, or project.
 - Specific Learning Goals which could include the students' understanding of a concept, being able to perform a task after the training, or completing the learning program.
 - Behavioural Goals which may require students to concentrate in class, complete assignments faster, and minimize distractions in class, among others.
- *Structuring the experience:* Stages and milestones are powerful tools that enable instructors to sequence knowledge and quantify what the students need to learn and achieve by the end of each stage or milestone. These milestones work well for students as well, as it makes the ultimate objective seem more achievable and measurable while ensuring that obstacles within and between each stage are easily identifiable.
- *Identifying resources:* Once the stages/milestones have been identified, the instructor can more easily judge which stages, if any, can be gamified, and how. Questions an instructor should think about while considering gamification include the following:
 - Can a tracking mechanism be applied to this specific stage?
 - What would be the currency and what determines the accomplishment of a level?
 - Are there clear rules that can be implemented?
 - Does the overall system give the student and/or instructor feedback?

- *Applying gamification elements*: The gamification process in education comes down to the elements that are applied to the learning program. As mentioned earlier, gamification is the addition of game-like-elements, also called game mechanics, in non-game settings. Game mechanics can be classified as self-elements or social-elements. We can distinguish them as it is presented below :

- Self-elements can be points, achievement badges, levels, or simply time restrictions. These elements make students focus on competing with themselves and recognizing self-achievement.
- Social-elements on the other hand, are interactive competition or cooperation, leader boards. These elements put the students in a community with other students, and their progress and achievements are made public.

Table 2. Self-elements and Social elements

Self-Elements (Complete Stage)	Social Elements (Push Stage)
Points	Leaderboards
Levels	Virtual Goods
Trophies/Badges	Interactive Cooperation
Virtual Goods	Storyline
Storyline	
Time Restrictions	
Aesthetics	

3.4. Gamification in the classroom

The gamification theory in education is that learners learn best when they are also having fun. Not only this – they also learn best when they have goals, targets and achievements to reach for, of course in a way the learner still perceives as fun.

Because of the addictive features of video games that intrigue children (and adults) and hook them, it is only natural that we see similar engagement results when these game-based elements are applied to learning materials.

Gamification in learning involves using game-based elements such as point scoring, peer competition, teamwork, score tables to achieve engagement, help students assimilate new information and test their knowledge. It can be applied to school-based subjects, but it can be also used widely in self-teaching applications and courses, showing that the effects of gamification do not stop when we are adults.

Technology permeates a lot of our day-to-day lives – has changed the way we live, shop, work, play, eat, meet people and socialise. Policy-makers are starting to explore the potential benefits of using technology to streamline teacher workload in earnest. We have also already known for some time that taking something many children love – games – and using some of the features to support learning has great benefits (Brown, 2000).

The approach to a second language, in the case that English, of students of any educational stage in general and students of the stage of Primary education in particular, must be motivating for them, since they will feel attracted to their learning and with a greater predisposition that prompts the student to continue with the proposed activity since you would like to achieve the established goal.

This motivation and its relationship with the methodological guidelines for teaching and learning a foreign language is supported by current legislation thanks to the fact that ORDER EDU / 278/2016, of April 8, which modifies Order EDU / 519/2014, of June 17, which establishes the curriculum and regulates the implementation, evaluation and development of primary education in the Community of Castilla y León considers the following:

- “One of the key elements in teaching competencies is awakening and maintaining motivation towards student learning. This implies an approach to the role of the student, active and autonomous, aware of being responsible for their learning. Active methodologies must be supported by learning structures cooperative, so that, through the joint resolution of the tasks, the group members know the strategies used by their peers and can apply them to similar situations.” (Huang and Soman ,2013)

Video games and gaming is part of a large popular culture that many pupils today are engaged with. This is, however, something that educators have had little success in exploiting for educational benefits. Implementing principles and mechanics of games into classroom teaching activity creates the gamified classroom, which is the setting for the research project. This study focuses on these principles and mechanics, and how they can be beneficial for the oral activity

of pupils. In the process of creating a gamified classroom, I designed a teaching scheme that facilitates the inclusion of games in the classroom and favor students' participation (Brown, 2000).

Gamification is based on simulation games, the latter being objects of study by Sitzmann (2011), who compares other learning methods with simulation, resulting in that the simulation improves knowledge retention by 9% and a 14% increase in skills-based knowledge. It is for this reason that gamification is a methodology that, in addition to being novel and attractive, is also shows that, thanks to it, students can increase their cognitive abilities.

The approach to a second language, in the case that concerns us to the English language, of students of any educational stage in general and students of the stage of Primary education in particular, must be motivating for them, since they will feel attracted to their learning and with a greater predisposition that prompts the student to continue with the proposed activity since you would like to achieve the established goal.

There are many tools for gamification. Some of them are web-based (cloud services) and do not require the installation of special software and allow access at any time and from any location. Among the most popular gamification tools are applications like Socrative, Kahoot!, FlipQuiz, Duolingo, Ribbon Hero, Classcraft, Plickers, ClassDojo and Goalbook. BadgeOS™ and its add-on BadgeStack is a free plugin to WordPress which automatically creates different achievement types and pages needed to set up badging system. Mozilla Open Badges Project is a project which goal is to enable the identification and recognition of acquired knowledge and skills of students outside the classroom – results of informal learning.

- Gamification and LMS (Learning Management System) Educational institutions use LMS to manage the learning process and offer a variety of electronic courses with learning resources and activities. LMS allow integration of Web 2.0 tools which improves their functionality and responds to the new educational paradigms and the necessity for collaboration and cooperation between all participants in learning. LMS are a suitable environment for gamification because they have tools for automatic tracking of students' results and progress. It is possible to retrieve data about the time in which students spent viewing and interacting with content. Learners are encouraged to be active participants in discussions, forums and blogs, to take part in developing learning content by creating wiki pages.

- Gamification in Moodle Moodle is one of the most popular learning platforms which allows teachers to manage online learning. Moodle is among those LMS which develop and offer features aiming to facilitate gamification of the learning process. Some of Moodle gamification capabilities are (Muntean, 2011), (Henrick, 2013) the following:
 - User's picture/avatar, User profiles contain a field for uploading a photo, therefore students can add a photo or avatar to their profile.
 - Visibility of the students' progress, helps users understand their actions, which may initially seem unrelated and small, are connected in a greater whole and lead to the achievement of a certain goal (The Beginner's Guide to Gamification). Moodle offers opportunities for visualizing the students' progress in e-courses by a Progress bar. The progress bar is a Moodle plugin and visually shows what activities or resources students have to complete and their progress in the course.
 - Display of quiz results, the results of quizzes or assignments which measure the level of acquired knowledge and skills by students can be visualized in an additional block in the course – Quiz results. Quiz results block can contain top results – students with the highest grades and/or the lowest grades or group results and adds competitive nature of the learning.
 - Feedback, instantaneous and positive feedback is the main reason which makes users feel motivated, engaged and encouraged in their actions. Tests and assignments, as well as all other activities in Moodle, provide opportunities for feedback – general, specific, for correct answers or wrong answers. Feedback can be used as a correction of students' actions and can be a stimulus and motivator to their further activities in the learning system.
 - Badges. which can be given to learners upon completion of several activities or for achieving a certain level of knowledge and competence. They can be used to display students' achievements and rewards.

- Leaderboards are visible to all users and they are a way of obtaining recognition from other learners. Students can see where they stand and compare their results and achievements to their colleagues. Leaderboards encourage competition between learners and motivate them to be more active participants in the learning process.

Besides, Moodle supports Conditional activities to restrict access to learning content in e-courses. Teachers can set multiple activity completion conditions/criteria which must be met by the students in order to access the activity. Conditional activities are a tool which creates prerequisites for setting learning objectives which must be met by the students to continue to the next activities. In conclusion, there are different ways to implement gamification in Moodle. The system features – automatic data processing and tracking of students’ progress along with completion tracking and conditional activities are the base for gamifying it (Kiryakova, Angelova, & Yordanova, 2013).

3.5. Gamification evaluation

There are many assessment techniques, however, in the educational field, we need an evaluation in which students examine what they have learned at the end of the unit, project or activities obtaining a certain quantitative result which does not show, on many occasions, the learning process they have followed and their evolution. In this project, I am going to evaluate the English language based on the Castilla y León Royal Decree.

It is essential to consider evaluation and the different strategies used to assess students’ progress as: self-evaluation, co-evaluation or the use of portfolios, which helps the student to be aware of their learning. Oral and written tests, assignments and projects, attitude towards learning and respect for other languages and their culture will help the evaluation process of teachers and the acquisition of competencies of students. (Boletín Oficial de Castilla y León, 2016)

According to the (Boletín Oficial de Castilla y León, 2016) decree, there are some evaluation criteria, and those are which I am going to develop in this project are:

- Know and know how to apply the most appropriate basic strategies for understanding general meaning, essential information or main points of the text practicing speaking, reading and writing.

- Identify the general meaning, essential information and main points in very short and simple oral texts in standard language, with simple structures and frequently used lexicon, articulated clearly and slowly and transmitted orally or by technical means, on common and specific topics related to with own experiences, needs and interests in everyday contexts predictable or related to areas of immediate need in personal public and educational settings, provided that the acoustic conditions are good and do not distort the message, you can listen to what was said or ask for confirmation and there is visual support or a clear contextual reference.

- Value the foreign language as an instrument of communication with others people and as a learning tool. Show interest and respect towards people who speak a foreign language.

And the assessable learning standards mentioned in the same decree are the specified below:

- It includes messages and public announcements which contain instructions, directions or other information (for example, numbers, prices, hours, in a station or a department store).

- Understand what is being said in simple everyday transactions (instructions, directions, requests, notices).

- Understand essential information in short, simple conversations you engage in order to deal with familiar topics such as yourself, family, school, leisure time, description of an object or place.

4. METHODOLOGY

The main methodology that is going to be developed in the classroom is Gamification, how can include gamified activities in the classroom and make the unit more attractive for children, that is why the classroom needs to be technological, this means that the classroom must have a computer with a digital board, speakers, projector among others for the games that are going to be developed. Most activities are going to be designed to be performed individually because of the Covid-19 situation, all the apps and web pages that are going to appear are designed to be present in the education field. Some of them are famous nowadays in some classrooms because they work properly, and security is one of the most important property to children. It is necessary to use these ICT resources safe because it is the main objective to the teacher to save their privacy and maintain the necessary information of the students in a secure way, in such a way that only the teacher, who acts as an administrator in these activities, is responsible for all the acts that are done throughout the development of the activities.

With these apps and web pages, the objective is to motivate the students and make them to focus better during the lessons. It is important to take into account that gamification is an attractive methodology that we all can use to motivate students in this case to talk in the English language. All the steps developed in each activity are in English, and all the things that children want to say have to be in English as well. We use this attractive methodology to lead children to the use of the English language. Encourage them to participate more in those subjects taught in English.

All the technological resources used in this proposal have awards in different steps, the fastest in do the activities, the friendly, who talk with the classmates and support them, the support, which helps each other among others. It depends on the activity, but all the activities have awards to motivate children. It is important to highlight that it is not a competition and it is important for children to know it. The awards are resources to motivate students, there is no winner, the most important objective is to do the activity properly and help other students, it means that finishing the activity is important to achieve all the objectives established in each activity.

These activities are going to be developed in bilingual subjects which are Natural Science, Social Science as well as Arts and Crafts. All the objectives of each subject will be evaluated through the gamified activities and the objectives achieved will be verified thanks to an

individual evaluation. In each subject, each activity is going to be developed according to the current decree and developed respecting Covid-19 rules to be secure every time.

The applications which are going to be used are the following:

- ClassDojo: It is a classroom management platform in which teachers, parents and students participate. Its objective is to manage a school classroom based on scores on student behavior, daily awards, study routines, creativity, if they help to the others and other items that we can analyze inside this application, through an easy-to-use interface, which supports various customization options to suit the needs of each class. In this way, if the student does a brilliant job students will earn points; on the contrary, if student annoys colleagues, the student will receive a negative score for this behaviour. The grading system depends on the teacher at all times, since it is who decides what to add and what to subtract, as well as the amount of these points when evaluating the behaviour of each individual.
- ClassCraft: It is a free online educational role-playing game in which teachers and students play together during class. By using many of the conventions traditionally found in modern-day games, students can level up, work as a team, and gain powers that have real-world consequences. The game, which serves as a playful option in any course curriculum, transforms the learning experience in a fun way throughout the school year.
- Plickers: It is a computer program that allows a formative assessment to be carried out without the need for students to bring a tablet/computer, mobile or any electronic device to class.

What do you need?

- A PDI, a pc or laptop and a mobile phone (by the teacher).
- A Plickers card with the QR code for each student. The teacher prints the cards with a visual code from the Plickers website, which is free. Give a card to each student and enter their name and assigned card on the web. Students paste it in their agenda or in a place that is easily accessible. where it won't scratch or bend. It is the same for the entire course.

- Live worksheets: It allows you to transform your traditional printable worksheets (doc, pdf, jpg ...) into self-correcting interactive exercises, which we call "interactive worksheets".

Students can complete these sheets online and send their answers to the teacher. This is good for the students as they are more motivating, for the teacher as it saves you correction time, and for the environment as it saves paper.

In addition to this, our interactive worksheets are benefitted by ICT tools: they can include sounds, videos, drag and drop exercises, join with arrows, and multiple selections among others.

- ABCya: It is a website with educational games for the little children. It has a variety of games. It lots of games and activities that children can do safely, there are different activities adapted for different ages, the teacher must select the activity that is more adapted to the year. Some games include voice instructions (in English), although in general they are all very easy to use.

The games and activities include concepts such as alphabetical order, coloring, upper and lower case letters, countable numbers, connecting the dots, numerical order, shapes, simple addition and subtraction, completing series among others.

- Learn English Kids: It is the British Council's website for children around the world who are learning English as a second language or a foreign language.
- Sporcle: it is a website full of questions, quizzes and contests on different topics, with which children can learn from the game in the classroom.
- Educaplay: It is a web platform that allows teachers to create different types of multimedia educational activities, through different scenarios or activities such as crosswords, word search, riddles, and dictations, among others.
- Anglomaniacy: This is a site for kids learning English filled which contains fun activities, games, songs and worksheets that can help them with their English. This is also a resource site for English teachers. We offer tons of free, ready-to-print teaching materials, as well as language resources to use online.

- Mes-games: It is a webpage which hosts free online English games, grammar games, questions and answer activities, vocabulary, listening, reading and spelling games. There are lots of topics to choose and all of them have lots of games to select.

4.1. Didactic proposal

This proposal consists on doing different games with different applications which can be used in class, to improve the teaching-learning process in the classroom. They have to do different activities to learn new things in each subject. The teacher is responsible to count the points in the classroom, these points are going to be developed later. In all the subjects I am going to use ClassDojo and Classcraft, as general apps to make a general point system, these two applications are going to be the principal ones and there are going to be more activities that will be developed with different applications. ClassDojo is an app where children have an avatar and get positive points when they do good things like a good answer, participation, help each other... and negative points to talk in Spanish, a wrong answer, do not help each other... and these points which are registered in a leaderboard, where all avatars appear with the points of each student. That application has other useful functions such as as a random picker, count down, etc which can be used in every subject. The parents can watch the leaderboard with the points and follow their children follow the development of the class. With Classcraft we can enter 4 different worlds, and each world corresponds to a subject, so we will have 4 different worlds, Within each world, we can develop a different story for them to carry out activities and thus meet the objectives of each subject. The idea is to work with more technological resources within each subject but use these two as the main ones for all bilingual subjects. The scenarios that we are going to develop in each subject are the following.

- Natural Science: (Topic - Matter and energy) They have to save the world by defeating a villain who wants to use non-renewable energies like coal, crude oil and natural gas. And the children have to defeat it using renewable energies. They have to do some activities about these energies and they can choose renewable energies or non-renewable energies, they must work as a team.
- Social Science: (Topic - Work) They have to choose one job, and they have to classify it in one of three sectors, then they have to do an advert for each job and create a shopping centre together. With some activities, they can choose the primary sector, secondary sector and tertiary sector. All jobs must be different, then each table is going

to be a different shop where they can ask the children their classmates about their jobs and their characteristics.

- Arts and Crafts: We are going to use the contents studied in Social Science and Natural Science, the children are going to make their job with a card, paper, pictures and crayons build and they have to choose one system to get the energy to their shop, for example, solar panels, windmill...)

In each subject, the students are going to participate and they are going to get some cards, cards. In total, there will be 8 cards, 2 for each subject one will have positive effects, while the other will involve something negative. If they obtain the positive card, they will receive an extra point in ClassDojo, while the latter involves a negative point in the application.

The other applications or web pages that it are going to be used in the different subjects are Ardora, JClic, Quizzes, Kahoot, Plickers, liveworksheets, educaplay and more webpages which are interesting to practice the things that we are going to learn.

4.2. Context

The school is a public school with two lines, nowadays some years have three lines because we have to respect Covid-19 rules. It is a bilingual school, which has Social Science, Natural Science and Arts and crafts as bilingual subjects. Many resources in the classroom can implant a gamification methodology. The class is formed by 13 students, two of them have ASD, autism spectrum disorder, and they need someone to stay with them all the time; another two students have significant curricular adaptations. The level of the classroom is low, they have come from Year two with a very low level of English because they have attended this stage in lockdown. Many of them have not made an effort to get the necessary objectives. The English level must be basic, the sentences have to be short and easy to understand. In this group, there is a good relationship between students. We have to take into account that social development is a fundamental element in these ages since the formation of their self-esteem. It depends on it through the interaction between peers that it is because this methodology is going to be good for these children.

They have to respect the classroom rules because all the people in the room must create a good environment that favours the learning and development of children. Teachers are aware of this premise, so we propose different strategies and attitudes so that students develop all their

capabilities. All the students are in the same English level instead of the two ASD students. Those students are out of the classroom most of the time, so when they are in class they are going to work with the rest of the students but with the help of the teacher and the support teacher. The children have 2h of Natural Science, 2h of Social Science, and 1h of Arts and Crafts. They have clear their table and their materials. They cannot share anything and go in groups because we must respect the Covid-19 rules.

4.3. Routines

There are several routines that the teacher does with the students at the beginning of each bilingual subject, they are developed in the first bilingual subject of the day. Those are used to learning better the topics, the numbers and the weather, they can remember it easily.

- When a bilingual class starts, the teacher says “We start the class in three, two, one...” and the children answer “zero”, at that moment all children have to talk in English during the lesson.
- Whether routine: At the beginning of the first bilingual subject in the morning, the teacher asks the children “What is the weather like today”, one child each day have to answer, then the teacher asks “What colour is the sticker that we have to put?” if it is sunny they have to put a yellow sticker if it is cloudy a blue sticker, if it is a rainy green sticker and if it is snowy a red sticker. The weather routine is reset each month with a new one. (*Annex 2*)
- Calendar: There is one calendar with lots of pictures, there are new pictures during the days. Each day of the month there is a new picture related to the unit that the children are studying in Natural Science and Social Science. Each child has to repeat the sentence and the next days they have to remember it. Before all the sentences about the Natural Science and Social Science sentences, the children are going to count, first cardinal numbers and then ordinal numbers, they have to arrive at thirty or thirty-one at the end of the month. During different lessons, the teacher can indicate the way to count like, count, down, two by two, three by three, two by two down... (*Annex 1*)
- Questions, after the first lesson, the teacher is going to ask the children questions about what they have studied in the other lesson, during the lessons, there are more questions. The teacher uses the random picker in ClassDojo to choose one student, then the student

answers, if the answer is correct they will get one positive point in ClassDojo and if it is wrong they will get a negative point. If the answer is uncompleted they will not get any point.

4.4. Natural Science

In this subject we are going to study matter and energy, children have to learn this, that is going to be known through self-evaluation and teacher's evaluation.

4.4.1. Objectives

The objectives are on the Castilla y León Royal Decree which children have to reach are the following ones:

- Know the elemental properties of matter and study and classify materials according to them.
- Identify the states of matter and correctly list the changes of state.
- Know and apply the basic principles that govern some physical changes: state and chemical changes: combustion. (Shape and oxidation)
- Understand the concept and types of energy, differentiating the different sources and assessing their origin, characteristics and the importance of making responsible use.
- Explain and recognize the influence of human behavior in the natural environment, identifying the sustainable use of natural resources, proposing a series of necessary measures for the sustainable development of humanity, specifying their positive effects. (Social Science objective)

4.4.2. Contents

The contents are on the Castilla y León Royal Decree which children have to reach are the following ones.

- Matter: properties, states and changes. Study and classification of some materials by their elemental properties.
- Different forms of energy. Renewable and non-renewable energies. Intervention of energy in everyday life.

- Planning and carrying out various experiences to study the properties of commonly used materials and their behavior in light, sound, heat, humidity and electricity.
- Physical changes: changes of state. (Shape)
- Chemical reactions: combustion. (Oxidation)
- Renewable and non-renewable energy sources. Sustainable and equitable energy development. Responsible use of energy sources on the planet.

4.4.3. Timing

The project is going to be developed from April 12th to May 12th, one month. All the contents are going to be distributed and developed in different activities and games in a proportionate way. First, we are going to talk about materials and their properties in Natural Science, there are basic things that children must know. Secondly in Natural Science we are going to do some games about changes of state and different changes that we can find in nature, we are going to review what we have studied the previous days and then, we are going to learn new things. Finally, we will introduce new concepts, their characteristics, how we can get them and where does it come from. In conclusion, this subject is going to be developed at the same time as the Social Science unit. All of the activities of the unit are going to be done with games, quizzes, and attractive activities, which are going to be developed in every lesson to motivate them to learn. We are going to use ClassDojo for the questions time and ClassCraft for the rest of the lesson. While we are using ClassCraft we are going to use other web pages or app to play games or do activities using ICTs. There are 10 lessons on this unit.

The initial routines are always the same. On the calendar, every day there is a new picture and they have to remember it, the sentence the picture is one sentence related to the unit, there are Natural Science and Social Science pictures, then we revise the other pictures of the other days and we say cardinal and ordinal numbers. (*Annex 1*) The second routine “What is the weather like today?”, then we have to put a sticker on the weather sheet. (*Annex 2*) And the last routine are the questions if we have studied something before. (The first lesson has no questions.)

4.4.4. Lessons

Table 3. Natural Science session 1

<u>First session</u> 12th April
<p>We are going to start the first lesson with the initial routines. As we start the topic, the only routine we are going to do is the weather routine "What is the weather like today", then we will add the first image to the calendar and we will all say it out loud to repeat it in the next session.</p>
<p>Once the routines have finished we will start with the video that introduces us to the unit. This video is about some children who make a tourist visit to the Museum of the Earth, there they see different places, the first place they visit is a forest, where a lot of living beings live, later the same landscape appears without trees due to great deforestation. The second place where they travel is to the ocean, where they see a lot of marine animals, and the children see how humans pollute this place with plastic bags and kill the animals that reside there. The third place is Antarctica and Antarctica, some cold places, where it is completely covered with ice and the fuels that humans use is what is causing climate change and we melt the polar caps, that is, the habitat of many animals who live in this place. The last place that the children visit is the river, where they collect the water from the rains and clean the water in a natural way, later the same river appears polluted and full of garbage due to pollution and the construction of factories next to the rivers. After the different biomes, they show us a city with green areas without pollution in which the human being lives a long and healthy life and the final question that this video teaches us is "Do we want to live in this place? During the video, we are going to listen and read the story.</p>
<p>After the video we are going to answer the question in groups, then we are going to explain how Classcraft works and how children have to use it properly. Last thirty minutes the teacher is going to explain this application with some videos that it has inside the web and how are we going to do it. The teacher is going to explain step by step slowly because children have to set their account at home. We are going to explain the rules and the teacher is going to print them and paste them into the classroom, then the children can read these rules wherever they want. At the end of the lesson, the children must know how ClassCraft</p>

works and how are we going to use it during the unit.

In this lesson, we have introduced the unit and the children know the topic that we are going to study during this unit. The children know what do they have to do to set their ClassCraft account.

Homework:

- Watch the tale, listen, read and translate it

<https://game.classcraft.com/teacher/class/XSBvYdqTLg8qn8CZH/quests/eHQssgWCFBZkSvHaZ/objectives/FoBTv6meDTjfSkjFc/progress>

Annex 3: Students in ClassCraft

Annex 4: Map of Natural Science

Table 4. Natural Science session 2

Second session 14th April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. Then before starting the lesson, we are going to check if the students have set their accounts and we are going to investigate more in this webpage to know how it works, We are going to use ClassDojo for the initial questions and ClassCraft the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about natural materials and man-made materials, and some properties of them because later on, they have to classify them, they have to copy in their notebook because we do not have a textbook and they need to have it to study it and do the homework. In the theory we are going to study some examples about natural material and where do they come from and man-made materials, which come from natural products. Then the properties are resistant, fragile, smooth, rough, flexible, rigid, hard and soft. They have to associate one material with one characteristic.

They are going to do one sheet at home about this. Then we are going to do some activities and questions about it at the end of the lesson and they can get points in ClassDojo. We are

going to explain how can they accept the mission and how can they do it at home. They have to do it to continue with the story and the theory.

Homework:

- Match and complete the sentences

<https://game.classcraft.com/import/quest/eHQssgWCFBZkSvHaZ>

Annex 5: First activity about materials

Table 5. Natural Science session 3

Third session 19th April

We start the lesson with the initial routines, and the teacher is going to ask some questions about the other lesson the children, using ClassDojo, if they answer correctly they will have a positive point and if they answer wrongly they will have a negative point. That it is the part of prior knowledge, in which the teacher knows who has studied and notified the parents using ClassDojo. Then we studied changes of state with a PowerPoint and drawing a little scheme where there are the three types of state and the fourth processes which are, condensation, evaporation, melting and freezing. They have to copy it in their notebook. Before this, we are going to do some activities about it and we are going to check if the children have understood it.

It is very important to make daily examples for example the ice cream melts when it is hot, the water gets transformed into ice when it is cold in the freeze, the condensation example is when the bathroom's vapour turns into the water again and when the water gets hot it is evaporated. They have to know all these ideas. We are going to do one game at the end of the class to review what the children have studied.

https://www.abcya.com/games/states_of_matter

Annex 6: Game about states of matter

Homework:

- Then they have to answer the task posted in ClassCraft about changes of state.

<https://game.classcraft.com/teacher/class/XSBvYdqTLg8qn8CZH/quests/eHQssgWCFBZkSvHaZ/objectives/YQXg5dzAXWFoS8Y8J/progress>

Annex 7: Changes of state activity

Table 6. Natural Science session 4

Fourth session 21st April

We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. First of all the teacher is going to explain the physical changes with some daily examples like the changes of state that they have studied in the other lesson. Secondly, the teacher is going to explain chemical changes and the development of the explanation is the same, the students are going to learn combustion and oxidation and some examples about it. When the teacher has explained the types of changes, we are going to compare them and do one game on the digital board, the teacher is going to make three groups, one group is going to be formed by four students, the second group four students as well and the last group is going to be formed by five students, the children who have ASD, is going to be in the group of five. The winner is going to get two points in ClassDojo and the second group one point

<https://jeopardylabs.com/play/physical-and-chemical-properties-and-changes>

Annex 8: Physical changes and chemical changes game.

Homework:

- Choose physical change or chemical change

<https://es.liveworksheets.com/ii294575ap>

Annex 9: Physical and chemical changes activity

Table 7. Natural Science session 5

Fifth session 26th April

We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. First, the teacher is going to start the lesson by asking “Where do humans can get energy?”, then the teacher is going to guide the students to renewable energies and non-renewable energies. Then the teacher is going to link this theory with some renewable energies that the human uses in daily life, the teacher is going to show the children some places where we use to get energy, for example, the windmills in the outskirts of the town, solar panels that some houses have nowadays to produce heat and electricity, and the watermill in the river of the town. With these examples, the children are going to see different ways to get energy from the environment which don't pollute are they are not going to disappear. Before the theory, we are going to start a game, in which children have to put solar panels and windmills to defend the town from the invaders, which the energy that they get, the can charge their machines and defend the school.

<https://wonderville.org/asset/solarenergydefenders>

Annex 10: Renewable energies game

Homework:

- Draw machines or tools to get energy

<https://game.classcraft.com/teacher/class/XSBvYdqTLg8qn8CZH/quests/eHQssgWCFBZkSvHaZ/objectives/ivywfWdcY26qo97Cg/progress>

Annex 11: Draw machines to get energies

Table 8. Natural Science session 6

<u>Sixth session</u> 28th April
<p>We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. Today the topic is the non-renewable energies, children must be aware that, these energies pollute and they are going to disappear. They are going to study three types of non-renewable energies, crude oil, coal and natural gas, there are some daily examples that children have to know, for examples cars, factories and other transports pollute our environment. Before this explanation, the children have to know the differences between renewable energies and non-renewable energies. In this lesson, we are going to play one game about this all together on the digital board, they have to answer one by one using the gel after clicking on the digital board. Then have to do the vocabulary words and then they can play the ballon's game to learn some vocabulary.</p> <p>https://learnenglishkids.britishcouncil.org/word-games/environment</p> <p><i>Annex 12: Non-renewable energies game.</i></p> <p>Homework:</p> <ul style="list-style-type: none">- Classify energies into renewable energies and non-renewable energies and write advantages and disadvantages <p>https://game.classcraft.com/teacher/class/XSBvYdqTLg8qn8CZH/quests/eHQssgWCFBZkSvHaZ/objectives/PLW64aKG47aQ74FCZ/story</p> <p><i>Annex 13: Activity about renewable energies and non-renewable energies</i></p>

Table 9. Natural Science session 7

<u>Seventh session</u> 3rd May

We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. This lesson had all the questions because we had finished all the theory, now we have done a review of all the unit. There are a lot of points in ClassDojo that students can get because there are a lot of questions and they can answer two or three times during this activity. Before this, we are going to start with Plickers, there are ten questions about the unit, they have to answer using a QR card to choose one of the four options that are in each question, at the end of the game the teacher can show the results of the class, if they get 100% they will get 3 points in ClassDojo if they have 90% they will get two points and if they have 80% one point. They only have five seconds to think of the correct answer. The teacher needs a phone with the camera because the QR cards are scanned with the app that the teacher has. The teacher gives each card to the children and the game starts. Before each question, the teacher has to explain why is that answer and why the other options are wrong. The teacher has to explain more things, not only answer the question, for example, more properties, more examples, which relationship had the question three with number five. The students are motivated, and we have to be aware and we can add new things or remember other things to them.

<https://www.plickers.com/seteditor/609814997d33c80013f650e9>

<https://www.plickers.com/seteditor/60981898e26b380014700da2>

Annex 14: Plicker's questions

They have no homework because we have finished the theory, they have to study the unit. We have finished with ClassCraft in Natural Science.

Table 10. Natural Science session 8

Eighth session 5th May

We start the lesson with the initial routines, and the children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo. This is the last day before the exam. We are going to review all the unit and we are going to solve some doubts that children probably have. Then the children are going to do a self

evaluation, they are going to think of themselves and their weaknesses and strong points of the unit. The teacher is going to read each sentence for all the class, and they are going to draw the face green if they are sure that they know, orange, if they think that they have to study more and red if they have no idea about that part. The teacher is going to read the sentences one by one. At the end of this activity, the children are going to paste it on their notebooks to study at home for the exam.

Annex 15: Self evaluation

Table 11. Natural Science session 9

Ninth session 10th May

The teacher has to explain the questions exam one by one, the exam has some exercises that the children have done in class. if the children finish the exam before time, they can draw and paint the cover page of the next unit.

Annex 16: Exam

Annex 17: Adapted exam

Table 12. Natural Science session 10

Tenth session 12th May

The teacher has to explain the questions exam one by one, then we are going to correct the exam all together in the digital board, and the teacher has to evaluate with the exam, Plickers, Crasscraft and ClassDojo. With these things, the teacher can get the final mark of each student. The exam is only 50% and the apps and web pages another 50%. With this lesson, we have finished unit 5 “Matter and energy”

4.5. Social Science

In this subject we are going to study the topic work, which is about economic sectors, shops , adverts, natural products and man-made products. The evaluation consists on a self-evaluation and students' evaluation.

4.5.1. Objectives

The objectives are on the Castilla y León Royal Decree which children have to reach are the following ones:

- Explain the differences between raw materials and manufactured products and identify the activities that belong to each of the economic sectors, describe their characteristics.

- Describe the operation of advertising and its techniques

4.5.2. Contents

The contents are on the Castilla y León Royal Decree which children have to reach are the following ones:

- Productive activities: Natural resources, raw materials. Manufactured products: crafts and industry.

- The production sectors.

- Consumption and advertising. Development of responsible consumption attitudes.

4.5.3. Timing

The project is going to be developed from April 8th to May 11th, one month. All the contents are going to be distributed and developed in different activities and games in a proportionate way. First, we are going to talk about different economic sectors and where the people usually work in these sectors and what do they do in different sectors. Secondly, we are going to be focused on the primary sector, we are going to name some examples like farming, mining or fishing, and two types of farming. Then we are going to be focused on the secondary sector, here we are going to study craft workers and industrial workers, the place where they work and what tools they use to work. Finally, we are going to study the tertiary sector and six types of them with two examples in each part. When we Had finished the three economic sectors, we are going to study how natural materials are transformed into products and they are in the market to buy these

products. Then, to end the unit we are going to study some techniques that adverts use to catch our attention. All of this is going to be done with games, quizzes, and attractive activities, which are going to be developed in the activity section for children that can motivate them to learn. We are going to use ClassDojo for the questions time and ClassCraft for the rest of the lesson. While we are using ClassCraft we are going to use other web pages or app to play games or do activities using ICTs. There are 10 lessons on this unit.

The initial routines are always the same. On the calendar, every day there is a new picture and they have to remember it, the sentence the picture is one sentence related to the unit, there are Natural Science and Social Science pictures, then we revise the other pictures of the other days and we say cardinal and ordinal numbers. (*Annex 1*) The second routine “What is the weather like today?”, then we have to put a sticker on the weather sheet. (*Annex 2*) And the last routine is the questions if we have studied something before. (The first lesson has no questions.)

4.5.4. Lessons

Table 13. Social Science session 1

<u>First session</u> 8th April
<p>We are going to start the first lesson with the initial routines. As we started the topic, the only routine we are going to do is the weather routine "What is the weather like today", then we will add the first image to the calendar and we will all say it out loud to repeat it in the next session.</p> <p>Once the routines have finished we will start with the video that introduces us to the unit. This video is about one child who has to think about what is going to be this job when he grows up. The children can identify different jobs. We read the tale and then we translate it. After the tale, we are going to play some games on the digital board to learn some vocabulary about jobs. Then we are going to talk about ten minutes about which job do they want to work when they grow up and why.</p>

Before the video we are going to answer the question in groups, then we are going to explain how Classcraft works and how children have to use it properly. Last thirty minutes the teacher is going to explain this application with some videos that it has inside the web and how are we going to do it. The teacher is going to explain step by step slowly because children have to set their account at home. We are going to explain the rules and the teacher is going to print them and paste them into the classroom, then the children can read these rules wherever they want. At the end of the lesson, the children must know how ClassCraft works and how are we going to use it during the unit.

In this lesson, we have introduced the unit and the children know the topic that we are going to study during this unit. The children know what do they have to do to set their ClassCraft account.

<http://learnenglishkids.britishcouncil.org/short-stories/what-will-i-be-when-i-grow-up>

<http://learnenglishkids.britishcouncil.org/word-games/jobs-1>

<http://learnenglishkids.britishcouncil.org/word-games/jobs-2>

Annex 18: Games about jobs

Annex 19: Social Science map

Table 14. Social Science session 2

Second session 13th April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. Then before starting the lesson, we are going to check if the students have set their accounts and we are going to investigate more in this webpage to know how it works, We are going to use ClassDojo for the initial questions and ClassCraft the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about the three economic sectors, where they usually work and examples of them, the teacher has to name different jobs and the students have to classify them depending on the place they work. Then the children are going to play some games on the digital board to do a little review of the lesson. During the games, the teacher has to do a

little review and assure that the children have understood everything. At the end of the lesson, students are going to tell to the class the jobs of their parents, then the rest of the class with the teacher's help, are going to classify it in the primary sector, secondary sector and tertiary sector.

Then they are going to check the homework in ClassCraft, they have to do a game in which they have to name some jobs.

<https://www.sporcle.com/games/MaryBetty/primary-secondary--tertiary-sectors>

Annex 20: Economic sectors game.

https://www.educaplay.com/learning-resources/4404115-economic_sectors.html

Annex 21: Separate different jobs into economic sectors

Homework:

- Complete and identify all the jobs

<https://anglomaniacy.pl/occupationsQuiz.htm#games>

Annex 22: Vocabulary about jobs.

Table 15. Social Science session 3

Third session 15th April

We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. We are going to study the primary sector, here the teacher has to focus on nature, the children are going to see three activities into mining, fishing and farming. The main activity that children have to learn in this lesson is farming, we are going to classify farming into two activities, arable farming, in which people work with plants and livestock farming in which people work with animals. We are going to focus on this activity because is one of the most important activities in our autonomous community.

Then, at the end of the lesson, we are going to play a game on the digital board about the primary sector. We have to do a review of all that we have studied in this lesson.

https://es.educaplay.com/recursos-educativos/5993432-primary_sector.html

Annex 23: Crossword about primary sector

<https://www.mes-games.com/people1.php>

Annex 24: Games about jobs

Homework:

- Complete the sentence and match the primary sector jobs with the picture

https://www.liveworksheets.com/worksheets/en/Social_Science/Economic_sectors/PRIMARY_SECTOR_yf1794046hs

Annex 25: Primary sector sheet

Table 16. Social Science session 4

Fourth session 20th April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. We are going to use ClassDojo for the initial questions and ClassCraft for the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about the secondary sector. Here is too important to classify workers as craft workers and industrial workers. Children must know where they work, in factories or workshops and what these workers use to work. In this case, craft workers use their hands or simple tools and industrial workers use machines. We have to mention FASA, an important factory near our city. Then we are going to watch some pictures of people in the Secondary sectors. Then we are going to play some games on the digital board.

Then, at the end of the lesson, we are going to play a game on the digital board about the secondary sector. We have to do a review of all that we have studied in this lesson.

https://www.educaplay.com/learning-resources/4411268-the_secondary_sector.html

Annex 26: Crossword about the secondary sector

Homework:

- Match the secondary sector jobs with the picture

<https://www.liveworksheets.com/qz247415nq>

Annex 27: Secondary sector sheet.

Table 17. Social Science session 5

Fifth session 22nd April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. We start the lesson with the initial routines, and children are going to answer some questions about the unit, about the theory that they have studied using ClassDojo, later on, they are going to copy the theory in their notebooks. We are going to use ClassDojo for the initial questions and ClassCraft for the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about the tertiary sector, this is the last sector that we are going to study in this unit

Here we going to study six activities in the tertiary sectors. We have to remind the children where they work. We are going to study these activities, health services, education, tourism, transports, retail, administration. Then we are going to study one example of each activity. They only have to know some examples there.

https://www.educaplay.com/learning-resources/5527635-social_science_tertiary_jobs.html

https://www.educaplay.com/learning-resources/2873542-tertiary_sector_asuncion.html

Annex 28: Games about tertiary sector

Homework:

- Select the type of job of the tertiary sector in each picture

https://es.liveworksheets.com/worksheets/en/Social_Science/Economic_sectors/Tertiary_sector_ir307453ug

Annex 29: Tertiary sector sheet.

Table 18. Social Science session 6

Sixth session 27th April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. We are going to use ClassDojo for the initial questions and ClassCraft the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about how people transform natural materials into products and then we can buy them at the supermarket. We have to be clear in this process, and name the five steps. In each step, we have to explain what is the main proposal. First, obtaining natural materials, the main thing is that we obtain natural materials from nature, then transportation, in which we transport natural materials to factories. Processing, in which we transform natural materials into products. Distribution, in this step we distribute products by markets, supermarkets or shops. Retail, that we have studied before. That is the way that we use to buy products from nature.

We are going to review and order these steps and do a little review of what we have seen before. The three economic sectors and the final product. We have to link those steps with the primary, secondary and tertiary sector. Then we are going to do a review of all of what we have seen. Then we play a game on the digital board.

https://www.educaplay.com/learning-resources/4404115-economic_sectors.html

Annex 30: Identify jobs and economic sectors.

Homework:

- Write in each picture if the work is on primary, secondary or tertiary sector.

<https://es.liveworksheets.com/nz51323nn>

Annex 31: Economic sectors sheet.

Table 19. Social Science session 7

Seventh session 29th April

We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. We are going to use ClassDojo for the initial questions and ClassCraft for the rest of the lesson, after this, we are going to explain the theory with a little PowerPoint about different techniques that adverts use to attract our attention. These techniques are going to be developed during the lesson in different steps. Catchy name, a name that we can remember; slogan, a sentence that we can remember; persuasive images, images to attract our attention, special offers which are low prices and famous people, they use opinions of famous people. We must link this topic with selling products, that it is inside the tertiary sector. Then we can show adverts that we already know and they can identify them.

We are going to create an advert using PowerPoint, the children are going to do a brainstorm, and they have to create a slogan a catchy name, images to attract the other people attention and we are going to share with the school in the corridor next to our classroom.

Table 20. Social Science session 8

<p><u>Eighth session</u> 4th May</p>
<p>We are going to start with the initial routines, we have started the unit, so we have to remember the pictures about the unit. We are going to use ClassDojo for the initial questions and ClassCraft for the rest of the lesson, we have finished all the theory, now we are going to do all the questions about the unit. They are going to get more stamps than they usually get. Before that, we are going to start with Plickers. The ten questions about the unit. The teacher has to evaluate it at the end of the game. The teacher has to disinfect the cards before sharing them. Then the children do a self evaluation to find some things of the unit that they have to study more. Then they have to paste it into their notebooks because the next lesson is going to be the exam.</p> <p>https://www.plickers.com/seteditor/609d4f38234476001255c681</p> <p>https://www.plickers.com/seteditor/609d508b9047010012a438c8</p> <p><i>Annex 32: Plicker's questions</i> <i>Annex 33: Self evaluation</i></p>

Table 21. Social Science session 9

<p><u>Ninth session</u> 6th April</p>
<p>The teacher has to explain the questions exam one by one, the exam has some exercises that the children have done in class. if the children finish the exam before time, they can draw and paint the cover page of the next unit.</p> <p><i>Annex 34: Exam</i> <i>Annex 35: Exam adapted</i></p>

Table 22. Social Science session 10

<p><u>Tenth session</u> 11th May</p>

The teacher has to explain the questions exam one by one, then we are going to correct the exam all together in the digital board, and the teacher has to evaluate with the exam, Plickers, Crasscraft and ClassDojo. With these things, the teacher can get the final mark of each student. The exam is only 50% and the apps and web pages another 50%. With this lesson, we have finished unit 5 “Work”

4.6. Arts and Crafts

In this subject, children are going to develop a project based on Natural Science and Social Science, they have to do a building where people work and something to get energy. They are going to use their creativity, skills and what they have learned during these units. At the end of the unit we will see every project and comment some things about each one.

4.6.1. Objectives and contents

- Imagine, draw and elaborate three-dimensional works with different materials, resources and techniques.
- Identify the immediate environment and the imaginary one, explaining its characteristics orally and in writing and with adequate plastic language.
- Carry out plastic productions following elementary guidelines of the creative process, experimenting, recognizing and differentiating the expressiveness of the different materials and pictorial techniques and choosing the most suitable for the realization of the planned work, enjoying both the elaboration process and the final result.

Contents:

- Classification of textures and tones to characterize objects and images.

- The materials of the plastic work. Exploration of qualities of materials such as transparency, roughness, lightness or ductility and unconventional treatment of the same.
- The spatial representation. Visual and tactile perception of volume.
- Modeling and constructions. The artistic work. Disposition to originality, spontaneity, expression of ideas, feelings and experiences in a personal and autonomous way in its creation.
- Knowledge and practice of respectful attitudes in exhibition areas.

4.6.2. Timing

The project is going to be developed from April 21st to May 5th. All the contents are going to be distributed and developed in different activities and games in a proportionate way. First, we are going to talk about what to do, we have to prepare our materials to build our shop and talk about which job is going to do each child. Then we are going to planning all the materials if it is possible we cannot repeat the job, they have to be from different economic sectors. After choosing jobs, we are going to do three groups with ClassDojo's random picker and they are going to use renewable energy like solar energy, water energy or wind energy to have electricity and heat in their building. This is going to be a project that children have to do to do a review of the Natural Science lesson and Social Science lesson.

There are 3 lessons on this subject. In the first one, we are going to plan and choose materials like boxes, paper, card... the second lesson children are going to make the building or the job and the last lesson they are going to make the machine to get the energy like solar panels, windmill, watermill... Then they have to link both of those projects and talk to the rest of the class about them.

4.6.3. Lessons

Table 23. Arts and Crafts session 1

<p><u>First session</u> 21st April</p>
<p>The teacher is going to explain the project step by step, in this lesson the children have to choose which job are they going to represent and which renewable energy are going to use. Then each child is going to make a list of materials that they are going to use to make the project, for example, card, boxes, paper, sticks... Then they have to do a previous design on paper, they have to draw the building or the job with all their properties and then they have to do a machine to get energy from natural resources like water, wind or sun. Then at the end of the class, they have to say to the rest of the class what are they going to do. We have to keep in mind that the children cannot repeat the same jobs. They have to be different. They have to bring the materials that they need to the next sessions. We are going to follow the lessons with ClassCraft. We are going to use ClassCraft during the lessons to solve doubts and have a clear idea of what to do.</p> <p><i>Annex 36: Arts and Crafts map</i></p>

Table 24. Arts and Crafts session 2

<p><u>Second session</u> 28th April</p>
<p>They are Going to start making the building with their materials and pictures. They have to bring all the materials for example glue, plasticine. They have to work individually.</p> <p><i>Annex 37: Materials and buildbing</i></p>

Table 25. Arts and Crafts session 3

<p><u>Third session</u> 5th May</p>

They have to make the machine that they are going to use to get energy, they can make solar panels, windmills, watermills... to have electricity in their jobs. Then, the children are going to talk about their job and their energy saying to the rest of the class some characteristics of the economic sectors that they have to choose and the properties of the energy that they use. If they talk and they do the project properly, ClassDojo, they will get 3 points in Natural Science and 3 points in Social Science.

Annex 38: Project together.

5. CONCLUSIONS

The preparation of this project has helped me to investigate a topic in which I am greatly interested, the methodology and the new trends that are emerging in recent years in the field of education. I have discovered how schools are looking for educational innovation, like children, they have born in a digitalized age, they are used to doing activities with technological tools, we have to teach them how to use it correctly and use it to teach, in this way they can use it to learn.

The game is a resource that we can use everywhere, and, although it is a technique very focused on the educational field, gamification is based on game techniques outside education, but which have been modified and adapted to the teaching area. With digital resources it is easier to adapt games to education and there are a lot of resources, web pages and applications where you can find activities.

Regarding future research lines, the first measure would be to put the entire game into practice as we have proposed throughout the project, in this way we could do the necessary changes order to see the strengths and weaknesses of this proposal and be able to improve it. Likewise, in addition to all the modifications that we can carry out and that I have already mentioned above, we can use the gamification methodology not only with the subjects taught in English, with any curricular subject.

In addition, it is important no to work with this methodology in a single session, but in the entire cycle. Taking this methodology and these games to other subjects and other courses can give a lot of variation to the structure in terms of content and activities; in any case this teaching-learning process in different areas would be attractive and motivating for the students.

In conclusion, I would like to highlight the importance that this educational stage has had in my academic and personal training. There are many and very diverse subjects that I have passed in this degree until I was able to present my final project, however, the subjects of the Specialization in English are the ones which have had more impact in my training and the result of this paper.

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7. ANNEXES

7.1. Routines

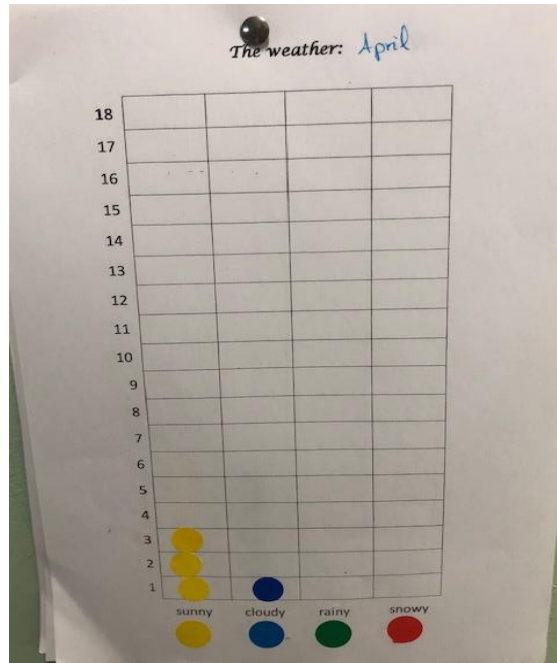
- Annex 1:

26. Calendar



- Annex 2:

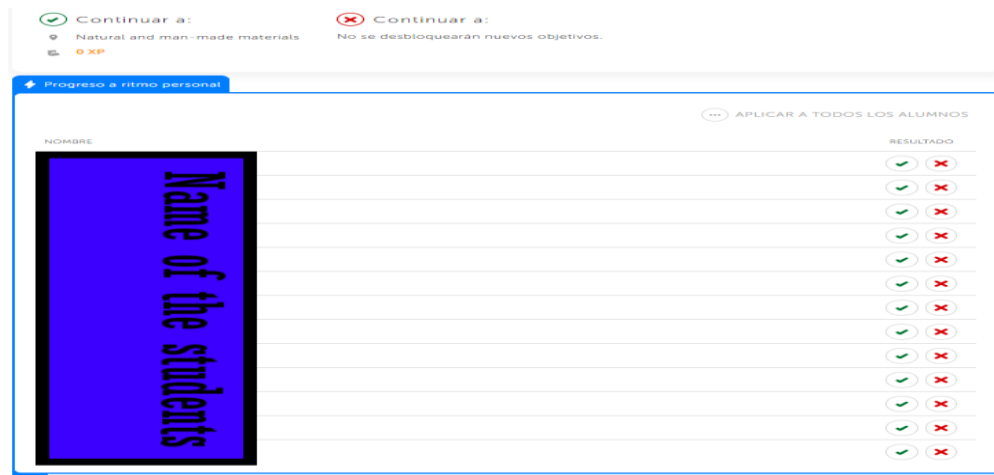
27. Weather chart



7.2. Natural Science

- Annex 3:

28. Students of the classroom in ClassCraft



- Annex 4:

29. Natural Science map

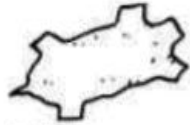


- Annex 5:

30. First activity about materials.

Name: _____

1 Match



Leather



Wood



Glass



Stone

a natural material that comes from a plant

a natural material that comes from an animal

a natural material that is a mineral

a man-made material

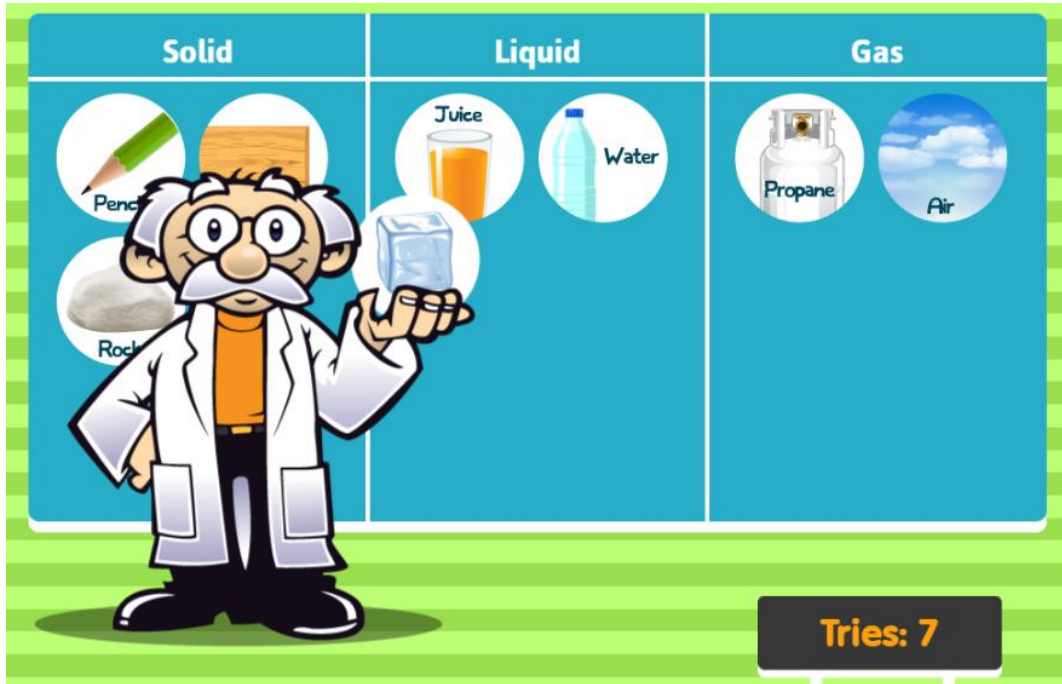
2 Use the words to complete the sentences.

strong flexible fragile elastic clear

- Glass is clear; you can see through it.
- Leather is _____; it can be folded without breaking.
- Rubber is _____; it stretches and later recovers its shape.
- Steel is _____; it can support heavy weights.
- Pottery is _____; it breaks easily.

- Annex 6:

31. Game about states of matter.



- Annex 7:

32. Changes of state activity

2. Write the name of these changes of state:

- : liquid to gas.
- : solid to liquid.
- : gas to liquid.
- : liquid to solid.

CONDENSATION
MELTING
EVAPORATION
FREEZING

- Annex 8:

33. Physical changes and chemical changes game.

Physical Property	Chemical Properties and Changes	Physical Change	Chemical or Physical Change	Misc.
100	100	100	100	100
200	200	200	200	200
300	300	300	300	300
400	400	400	400	400
500	500	500	500	500

MENU

Team 1	Team 2	Team 3
0	0	0
+	+	+
-	-	-

In each number there is one question

This occurs when a sliced banana or apple is exposed to oxygen.

Team punctuation during the game

Team 1	Team 2	Team 3
1200	800	2400
+	+	+
-	-	-

- Annex 9:

34. Physical and chemical changes activity.



Physical change



Chemical change



Chemical change



Physical change
Chemical change



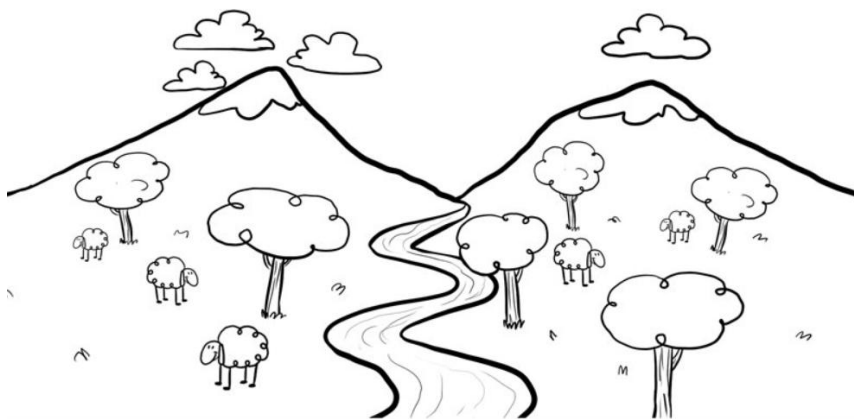
- Annex 10:

35. Renewable energies game



- Annex 11:

36. Draw machines




- Annex 12:

37. Non-renewable energies game

Score 0%

P

F



●●●●●●●●

8 items remaining

pollution

polluted rivers

chemical waste

recycling

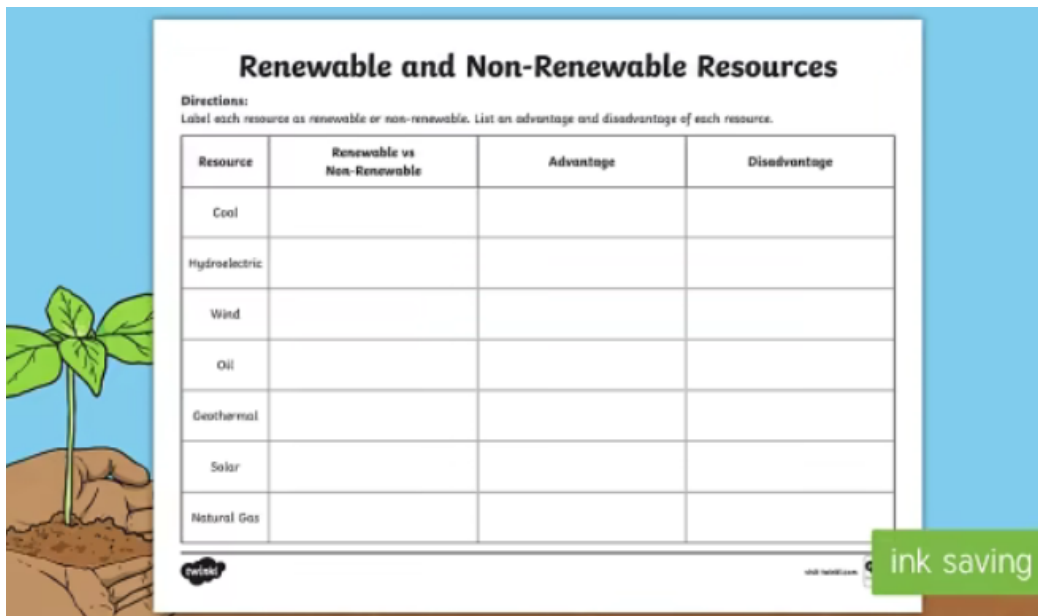
alternative energy

deforestation



- Annex 13:

38. Chart about renewable energies and non-renewable energies



Renewable and Non-Renewable Resources

Directions:
Label each resource as renewable or non-renewable. List an advantage and disadvantage of each resource.

Resource	Renewable vs Non-Renewable	Advantage	Disadvantage
Coal			
Hydroelectric			
Wind			
Oil			
Geothermal			
Solar			
Natural Gas			

ink saving

- Annex 14:

39. Plicker's questions

Where do Natural materials come from?



- A Oceans, forests or deserts
- C Ground, animals or plants
- B Ground, factories or plants
- D People, factories or mountains

The glass is a...



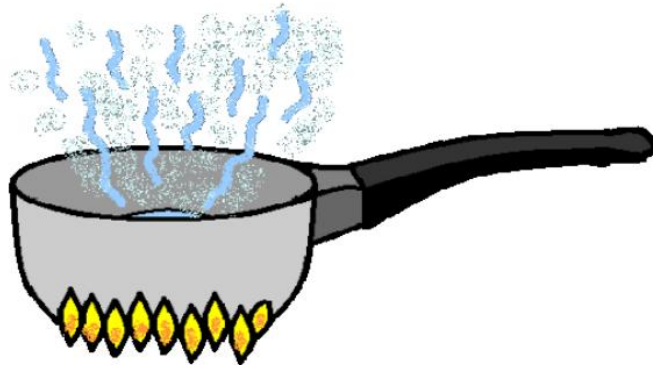
- A flexible material
- B smooth material
- C rough material
- D soft material

How many states of matter are there?



- A One
- B Three
- C Two
- D Four

What are the changes of state?



- A Condensation, evaporation, freezing and liquid
- B Condensation, evaporation, gas and solid
- C Solid, liquid and gas
- D Condensation, evaporation, freezing and melting

Physical changes are irreversible and chemical changes are reversible



- A True
- B False

Where does solar energy come from?



A Solar panels

B Sun

C Water

D Wind

Where does hydropower come from?



A Solar panels

B Sun

C Moving water

D Wind

What do we use to get wind energy?



A Windmills

B Hydroelectric power station

C Solar panels

D Wind

Non-renewable energies are not going to disappear



A Solar panels

B Sun

C Water

D Wind

Crude oil is a combustible liquid



A True

B False

- Annex 15:

40. Self evaluation

Self-evaluation of the minimum contents and objectives	NO	REGULAR	YES
1. I can difference between natural materials and man-made materials and I know some examples of them.			
2. I can write different material properties and I can identify some examples of them.			
3. I can write and identify the fourth changes of state and the three states of matter.			
4. I can differentiate physical changes and chemical changes and I can describe them in English.			
5. I can differentiate the types of renewable energies and say three examples of each type.			
6. I participate in class every day (I raise my hand three times at least) and I speak in English.			
7. I answer properly in class to the daily questions.			
8. I review at home every day what we have learned.			
9. I have done activities at home to review the unit.			

- Write in green the happy face, in orange the serious face and in red the sad face.
- Before the exam you must review and study the points in orange and red.
- These points which are in green should be reviewed as well.

41. Exam

Name: _____

1. Match: (1 p.)

We use solar panels to

Wind energy

We use hydropower to

We use coal to

We use crude oil to

Produce petrol, heat or plastic.

Produce heat.

Comes from the wind.

Produce electricity from moving water.

Transform solar energy into electricity.

2. Correct the sentences: (1 p.)

- Non-renewable energies don't pollute.
.....
- Coal and solar energy are examples of renewable energies.
.....
- Natural gas is a combustible liquid.
.....
- Physical changes are reversible.
.....
- Combustion and oxidation are examples of physical changes.
.....

3. Write 5 sentences using these words: (2 p.)

- Resistant:
- Smooth:
- Hard:
- Windmills:
- Mines:

4. Answer the questions: (2 p.)

- Why is coal a non-renewable energy? -----

- What do we use to transform wind energy into electricity?

- Where does hydropower come from? -----

- How many states of matter are there? -----
- Write the states of matter: -----

5. Circle the renewable energies in GREEN and the non-renewable energies in BLUE: (1 p.)

NATURAL GAS	SOLAR ENERGY	CRUDE OIL
WIND ENERGY	HYDROPOWER	COAL

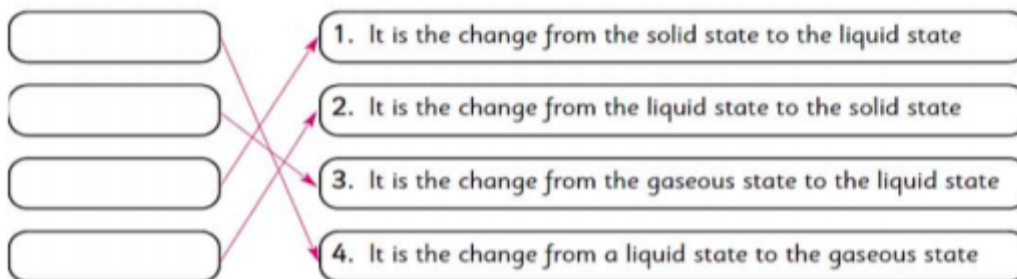
6. Complete: (1 p.)

Is it natural material or man-made material?

Natural materials	Man-made materials

PLASTIC
GLASS ROCKS
WOOL PAPER
WOOD

7. Write the names about these definitions: (1 p.)



42. Adapted exam

Name: _____

1. Match: (1 p.)

We use solar panels to

Wind energy

We use hydropower to

We use coal to

We use crude oil to

Produce petrol, heat or plastic.

Produce heat.

Comes from the wind.

Produce electricity from moving water.

Transform solar energy into electricity.

2. Correct the sentences: (1 p.)

- Non-renewable energies **DONT** pollute.
.....
- **COAL** and solar energy are examples of renewable energies.
.....
- Natural gas is a combustible **LIQUID**.
.....
- Physical changes are **REVERSIBLE**.
.....
- Combustion and oxidation are examples of **PHYSICAL** changes.
.....

3. Escribe un material que tenga esta propiedad: (2 p.)

- Resistant:
- Smooth:
- Hard:
- Flexible:
- Rigid:



4. Answer the questions: (2 p.)

- Why is coal a non-renewable energy? Because
- What do we use to transform wind energy into electricity? We use to transform wind energy into electricity.
- Where does hydropower come from?
Hydropower comes from
- How many states of matter are there? There are
- Write the states of matter:, and

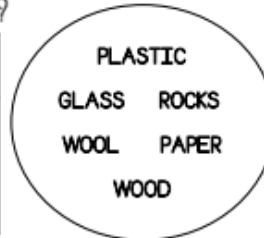
5. Circle the renewable energies in GREEN and the non-renewable energies in BLUE: (1 p.)

NATURAL GAS	SOLAR ENERGY	CRUDE OIL
WIND ENERGY	HYDROPOWER	COAL

6. Complete: (1 p.)

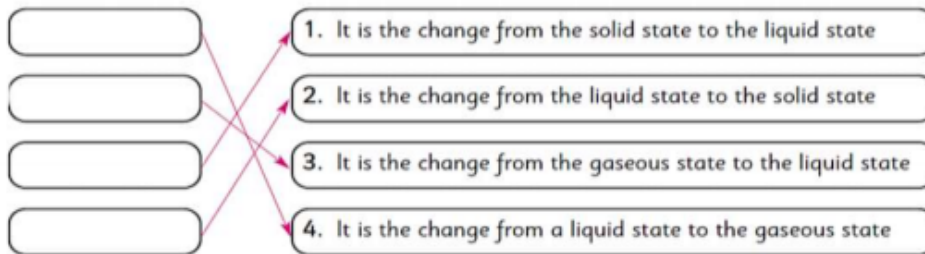
Is it natural material or man-made material?

Natural materials	Man-made materials



7. Write the names: (1 p.)

FREEZING EVAPORATION
CONDENSATION MELTING



7.3. Social Science

- Annex 18:

43. Games about jobs

 photographer	 actor	 sailor	 astronaut
 artist	 postal worker	 zoo-keeper	 engineer

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

 vet	 doctor	 dancer	 firefighter
 farmer	 singer	 police officer	 nurse

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

- Annex 19:

44. Social Science Map



- Annex 20:

45. Economic sectors game.

QUESTIONS REMAINING **10** CORRECT **0** WRONG **0** SCORE **0/10** TIMER **04:48**
[Give Up](#)

Furniture manufacturer

Primary Tertiary Secondary Secondary Secondary Tertiary Secondary Tertiary
 Primary Primary

- Annex 21:

46. Separate different jobs into economic sectors

Economic sectors

0/2 NUM. TRIES

100 SCORE

00:10 TIME

0/6


TERTIARY SECTOR

LARGE MACHINES	PRODUCTS	HEALTHCARE	AIR TRANSPORT
MINING	LIVESTOCK	EDUCATION	RAW MATERIALS
CONSTRUCTION	TOURISM	CROP	FOREIGN TRADE
FORESTRY	ENERGY INDUSTRY	RETAIL	METAL INDUSTRY
DEEP-SEA FISHING	MANUFACTURING		

- Annex 22:

47. Vocabulary about jobs.

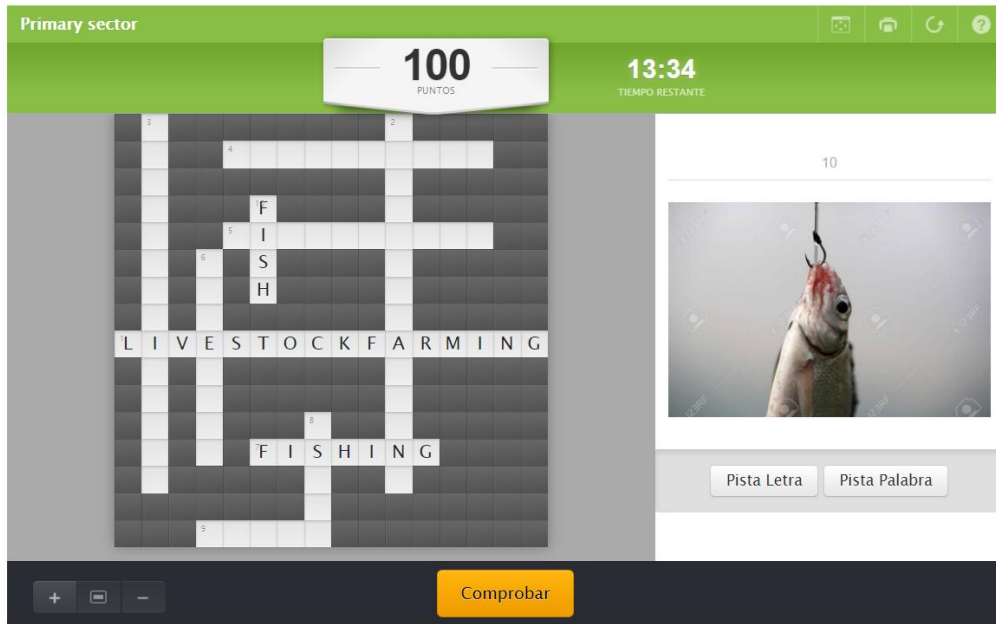
1 2 3 4 5 6 7 8 9 10 11 12



postman mechanic farmer seller

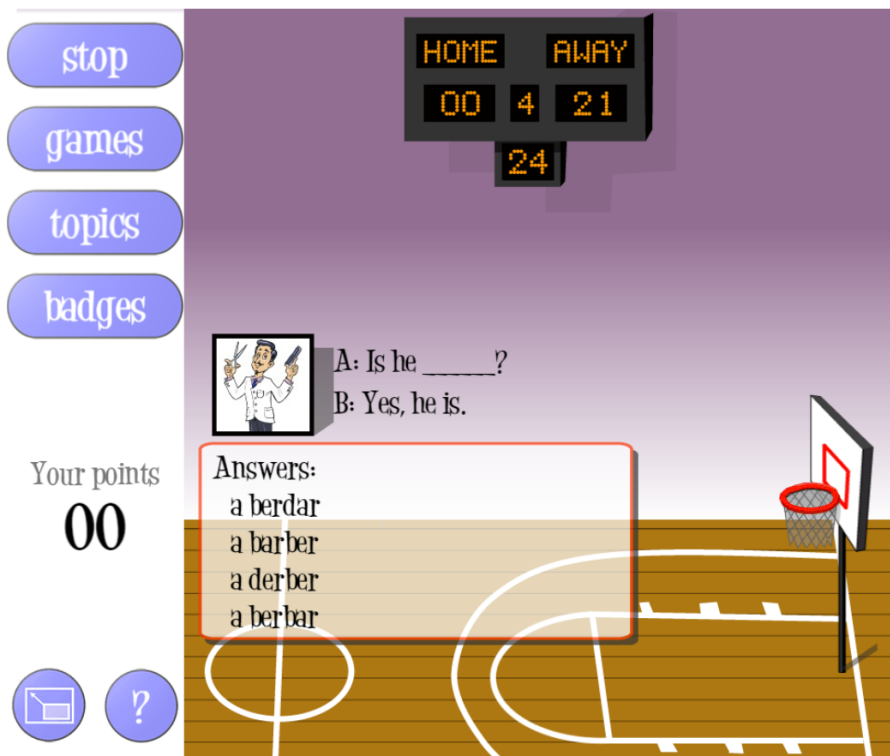
- Annex 23:

48. Crossword about primary sector.



- Annex 24:

49. Games about jobs.



- Annex 25:

50. Primary sector sheet.

PRIMARY SECTOR






1. Drag and drop

In the primary sector, _____ obtain
_____ from _____

NATURAL RESOURCES WORKERS RAW MATERIALS

2. Match

CROP FARMING LIVESTOCK FARMING MINING
FISHING



LIVEWORKSHEETS

Finish!!

- Annex 26:

51. Crossword about the secondary sector.

THE SECONDARY SECTOR

100 SCORE

00:54 TIME

9

Show Letter Show Word

Check

- Annex 27:

52. Secondary sector sheet.

Nombre: Clase:

The secondary sector / El sector secundario
Vocabulary (page 40 and 41) / Vocabulario (página 40 y 41)

Une las palabras a sus fotos correspondientes

Industry

Crafts

Construction

Where were these objects made? / Dónde fueron hechos estos objetos?
Coloca las palabras en sus casillas correspondientes

Factory Workshop Construction

A. Bridge

B. Motorbike

C. Jars




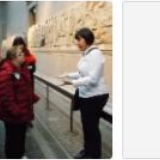













Finish!!

- Annex 28:

53. Games about tertiary sector

Social Science Tertiary Jobs

0/2 NUM. TRIES 100 SCORE 02:09 LEFT TIME

Tertiary Sector Asuncion

100 SCORE 00:38 TIME

8. Tertiary Sector Asuncion
Tourism can be for purposes.

- Cultural, recreational or relaxation.
- Too few
- Fame
- Economy




Previous 8/10 Next




- Annex 29:

54. Tertiary sector sheet.

TERTIARY SECTOR

1.- Choose the right answer.

		
<input type="text" value="education"/>	<input type="text" value="public transport"/>	<input type="text"/>

		
<input type="text"/>	<input type="text"/>	<input type="text"/>

2.- Read the definitions and choose the correct word.

2.1.- workers help us learn new things.

2.2.- workers help us on holidays.

2.3.- workers look after our health.

2.4.- workers move people and products from one place to another.

LIVEWORKSHEETS

- Annex 30:

55. Identify jobs and economic sectors.

Economic sectors

0/2 NUM. TRIES 100 SCORE 00:08 TIME

0/6 TERTIARY SECTOR

METAL INDUSTRY	FORESTRY	TOURISM	LIVESTOCK
AIR TRANSPORT	MINING	HEALTHCARE	DEEP-SEA FISHING
EDUCATION	CONSTRUCTION	MANUFACTURING	RETAIL
LARGE MACHINES	RAW MATERIALS	FOREIGN TRADE	CROP
ENERGY INDUSTRY	PRODUCTS		

- Annex 31:

56. Economic sectors sheet.

ECONOMIC SECTORS

Take a look at these images and decide which sector each activity belongs to. Write **primary, secondary** or **tertiary**.

 a) <input type="text"/> sector	 b) <input type="text"/> sector	 c) <input type="text"/> sector
 d) <input type="text"/> sector	 e) <input type="text"/> sector	 f) <input type="text"/> sector
 g) <input type="text"/> sector	 h) <input type="text"/> sector	 i) <input type="text"/> sector

Now, complete these sentences. Write **primary, secondary** or **tertiary**.

a) Media, tourism, healthcare and education are all included in the sector.

b) The sector includes activities such as arable farming, forestry and mining.

c) Construction of infrastructure and energy industries are part of the sector.

¡Terminado!

57. Picker's questions

How many economic sectors are there?



A One

B Three

C Two

D Tree

Where do people usually work in the primary sector?



A In a factory

B In a workshop

C In different places

D In nature

Where do people usually work in the secondary sector?



- A In a factory
- B In a hospital
- C In different places
- D In nature

Where do people usually work in the tertiary sector?



- A In a supermarket
- B In a workshop
- C In different places
- D In nature

Bank clerk and secretary are examples of administration

A True

B False

We obtain natural materials from the...



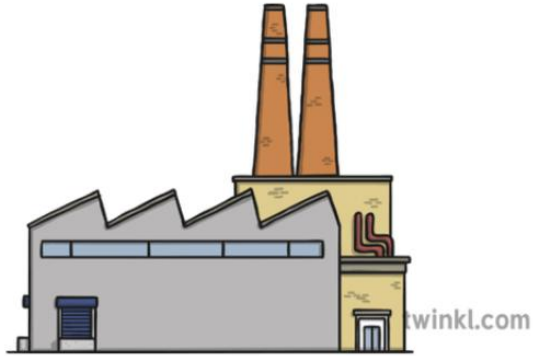
A ground

B animals

C all of them

D plants

We transform natural materials into products



A Processing

B Retail

C Obtaining natural materials

D Distribution

Lorries transport natural materials to a factory



A Processing

B Retail

C Transportation

D Distribution

A catchy name is a sentence you can remember



A True

B False

Special offers are low prices






























A True

B False

- Annex 33:

58. Self evaluation.

Self-evaluation of the minimum contents and objectives	NO	REGULAR	YES
1. I can name the three economic sectors and I can identify where people usually work in each sector.			
2. I can name examples of jobs and workers in different sectors.			
3. I can describe (make sentences) to explain different jobs of different sectors.			
4. I can name, sort and explain the 5 steps which we have to follow to transform natural materials into products.			
5. I can name, identify and explain in English different techniques that adverts use to catch our attention.			
6. I participate in class every day (I raise my hand three times at least) and I speak in English.			
7. I answer properly in class to the daily questions.			
8. I review at home every day what we have learned.			
9. I have done activities at home to review the unit.			

- Write in green the happy face, in orange the serious face and in red the sad face.
- Before the exam you must review and study the points in orange and red.
- These points which are in green should be reviewed as well.

59. Exam.

Name: _____

1. Complete the text: (1 p.)

We classify work into _____ sectors: _____, _____ and _____ sector. Using these sectors, we transform _____ into _____.

2. Match the sentence halves: (1 p.)

- In the primary sector...
- In the secondary sector...
- In the tertiary sector...

- People work in different places.
- People obtain natural materials.
- People transform natural materials into products.

3. Write each job in the correct column and add one job in each column: (1 p.)

NURSE	BUS DRIVER	BUTCHER	TEACHER	BANK CLERK
EDUCATION	HEALTH CARE	TRANSPORT	ADMINISTRATION	RETAIL

4. Write "P" for primary sector, "S" for secondary sector or "T" for tertiary sector: (1 p.)

- FACTORY
- WORKSHOP
- MINING
- LIVESTOCK

- RETAIL
- TRANSPORTS
- CRAFT WORKER
- TOURISM

- ARABLE FARMING
- EDUCATION
- FISHING
- INDUSTRIAL WORKER

5. Answer the questions: (1 p.)

- How many sectors are there?
- Where do industrial workers work?
- What are the 2 types of farming?
- Write a difference between craft workers and industrial workers:

6. Correct the sentences: (1 p.)

- A catchy name is a sentence you can remember.
- In mining, people extract natural materials from the air.
- Persuasive images are low prices.
- Craft workers work in a factory and industrial workers use their hands.

7. Write 4 sentences using these words: (2 p.)

- Market:
- Fish:
- Workshop:
- Advert:

8. Order: (1 p.)

- | | | | |
|----------------|--------------------------|--------------------------|-----------------------------|
| Processing | <input type="checkbox"/> | <input type="checkbox"/> | Distribution |
| Transportation | <input type="checkbox"/> | <input type="checkbox"/> | Obtaining natural materials |
| Retail | <input type="checkbox"/> | | |

- Annex 35:

60. Adapted exam

Name: _____

1. Complete the text: (1 p.)

PRIMARY THREE	TERTIARY SECONDARY	NATURAL MATERIALS PRODUCTS
------------------	-----------------------	-------------------------------

We classify work into _____ sectors: _____, _____ and _____ sector. Using these sectors, we transform _____ into _____.

2. Match the sentence halves: (1 p.)

- In the primary sector...
- In the secondary sector...
- In the tertiary sector...

- People work in different places.
- People obtain natural materials.
- People transform natural materials into products.

3. Write each job in the correct column: (1 p.)

NURSE SELLER	BUS DRIVER DOCTOR	BUTCHER TAXI DRIVER	TEACHER SECRETARY	BANK CLERK HEAD TEACHER
-----------------	----------------------	------------------------	----------------------	----------------------------

EDUCATION	HEALTH CARE	TRANSPORT	ADMINISTRATION	RETAIL

4. Write 'P' for primary sector, 'S' for secondary sector or 'T' for tertiary sector: (1 p.)

FACTORY
 WORKSHOP
 MINING
 LIVESTOCK

RETAIL
 TRANSPORTS
 CRAFT WORKER
 TOURISM

ARABLE FARMING
 EDUCATION
 FISHING
 INDUSTRIAL WORKER

5. Write "TRUE" or "FALSE": (1 p.)

- There are four economic sectors. _____.
- Industrial workers work in a factory. _____.
- There are two types of farming. _____.
- Craft workers use machines. _____.
- Special offers are images to attract your attention. _____.
- Adverts use opinions of famous people. _____.

6. Correct the sentences: (1 p.)

- A catchy name is a SENTENCE you can remember.
.....
- In mining, people extract natural materials from the AIR.
.....
- PERSUASIVE IMAGES are low prices.
.....
- Craft workers work in a FACTORY and industrial workers use THEIR HANDS.
.....
.....

7. Write 4 sentences using these words: (2 p.)

- Market: _____
- Doctor: _____
- Workshop: _____
- Adverts: _____

8. Order: (1 p.)

Processing

Distribution

Transportation

Obtaining natural materials

Retail

7.4. Arts and Crafts

- Annexed 36:

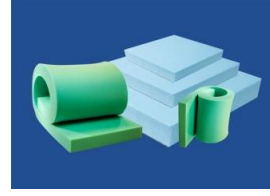
61. Arts and Crafts map



- Annexed 37:

62. Materials and building.





- Annex 38:

63. Final Project.

