

# MAKE IT GREEN



## TEACHER'S GUIDE

## THE “MAKE IT GREEN” PROJECT

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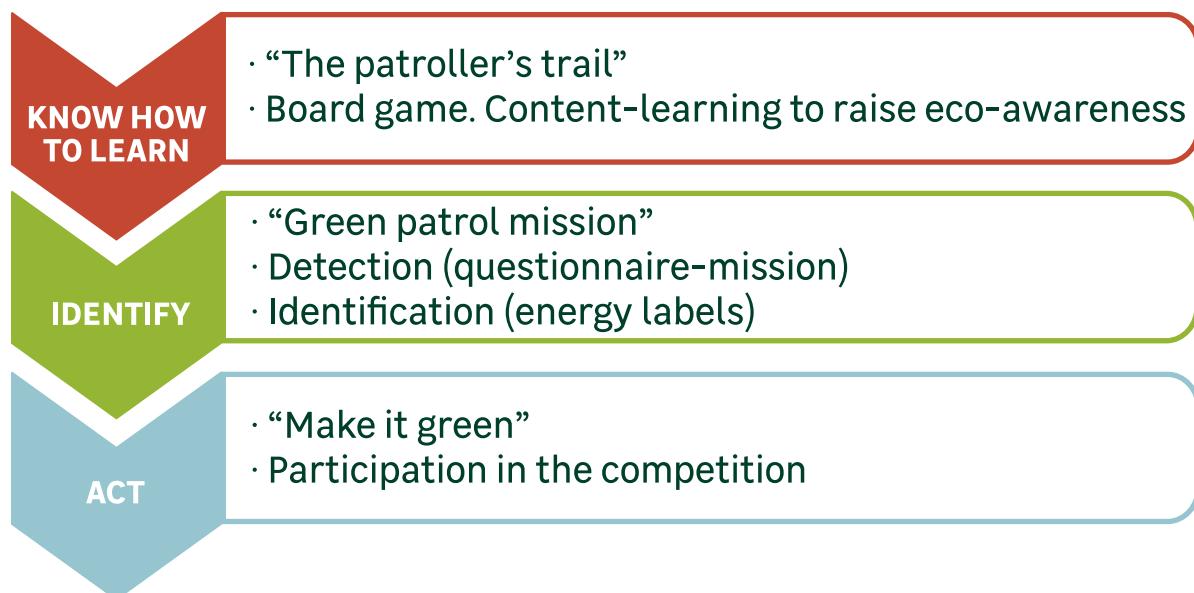
Dear teacher, this is more than a simple school competition. We are presenting you an ideal, a cross-cutting concept that affects students, schools and society: that of raising awareness about the importance of building a better world.

Did you know that by encouraging recycling and the responsible use of water and energy we can reduce our ecological footprint and improve the quality of life for current and future generations?

As a teacher, we are deeply appreciative of your work: as a transforming agent, we value your active and voluntary contribution to the social, sustainable, responsible and environmental advancement work done in your classroom.

To tackle these issues that affect the society we all form an integral part of, the Primary school curriculum incorporates curricular elements related to sustainable development and the environment.

Below is a diagram summarising the three teaching units where we provide information, foster analysis and support initiatives that seek to improve your most immediate environment.



## TEACHING CRITERIA

1

### VIABILITY



The **first Teaching Unit** is based on **multiple intelligences** and **cooperative work**.

It is suitable for students aged 7 to 11 years.

Here you will teach your students the concepts of *sustainable development, responsible consumption and energy-savings* through a board game whose content is linked with: Social Sciences; Natural Sciences; Social and Civic Values; and even with Maths.

In the **second Teaching Unit**, students, in groups, will have to analyse, detect and identify elements that do not have an ECO focus. Through this pursuit, they will work on content outlined in Human Impact on the Environment (Social Sciences) and Sustainable and Equitable Energy Development (Natural Sciences) as cross-curricular activities.

In the **third Teaching Unit**, students will learn how to draw up a project, and this will be used to participate in the competition. As you already know, according to the Spanish LOMCE law to improve the quality of education, competences are conceptualised as “know-how”, and what better way to acquire this than through a project designed, developed and applied by your students?

The three Teaching Units have been developed by linking them with the Curriculum, taking into account the COMPETENCES, SUB-COMPETENCES AND DESCRIPTORS of each, and relating them to the content and evaluation criteria of each subject area.



2

## 2 OBJECTIVE



After the three Teaching Units, the students will have greater environmental awareness, valuing the benefits of sustainable development and responsible consumption, as well as the care and conservation of the environment concerning their most immediate surroundings.

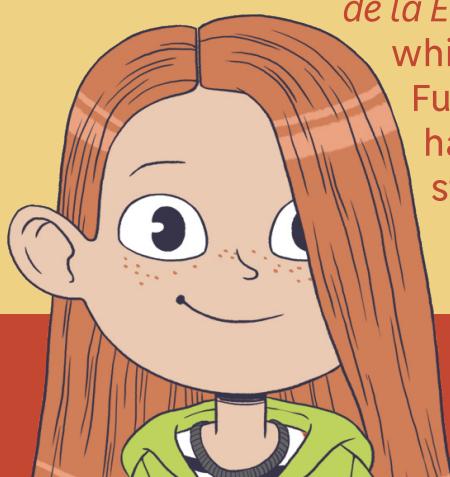
Your participation in the competition will contribute to help develop in your students the habit of working in a team and assuming responsibilities, and also a self-confident attitude, a critical eye, and raising their awareness about their involvement and participation in today's society.

In this way, we are encouraging the integration of the principles of responsible consumption, supporting initiatives of projects drawn up by students, and thereby promoting an increase in awareness on energy-savings, recycling and the environment.

## 3 IMPLEMENTATION



**UNIT 1- LEARN:** The questions on the cards (Concepts and statistical data) have been taken from the *Spanish Practical Energy Guide (La Guía Práctica de la Energía)*, drafted by the Spanish Ministry of Industry, which means that they are based on official guidelines. Furthermore, the issues and focuses outlined in them have a direct link with the learning content and standards implemented in the Spanish LOMCE.



**UNIT 2- OBSERVE:** The questionnaires that your students will use to carry out the green patroller missions, with special attention on zones in the school or neighbourhood that require some ECO change or improvement, have been developed with a focus on the “learn to learn” Competence.

**UNIT 3- ACT:** I suppose that you will already know that the Spanish LOMCE places great emphasis on the fact that boys and girls should do projects in groups, something that can be easily seen by glancing at the content of each subject area. For this reason, throughout the project, we will be encouraging cooperative work.

## 4

## GAMIFICATION



Its ludic nature helps students interiorise the concepts and content in a more entertaining way, creating a **positive experience** for them.

A series of mechanical and dynamic techniques have been extrapolated from games: in this case, we have developed the game in line with the workings of the Game of the Goose and Trivial Pursuit, seeking to diversify the methods of teaching and educational strategies that are used in schools.

The game model really works as it successfully manages to motivate students, developing greater commitment in them through **meaningful learning**, and boosting their spirit of improvement.

This method enriches learning processes as it improves learning results. It also achieves the involvement of the student in carrying out an activity.

Furthermore, the game, the patrol and the project (Units 1, 2 and 3) give you the opportunity to work on aspects such as motivation, effort and cooperation, amongst others, in your classroom.

## 5 RESULTS



And finally, we felt that it would be more useful for you, as a teacher, to use these Teaching Units as assessable material.

For this reason we have prepared **monitoring and evaluation sheets**. These will allow you to assess and evaluate your students' progress while they are having fun.

You will see that on each monitoring sheet there is a learning criterion and standard relating to their participation in cooperative projects, along with specifics for each subject area (Social Sciences, Natural Sciences, Social and Civic Values, Maths).

# CURRICULUM LINKAGE

## A LINKING THE “MAKE IT GREEN” VALUES WITH THE LOMCE

*BOE (Official Spanish Gazette). Saturday 1 March 2014.  
Royal Decree 126/2014 of 28 February.*

“In line with Recommendation 2006/962/EC of the European Parliament and of the Council, of 18 December 2006, on **key competences** for lifelong learning, this royal decree is based on the **enhancement of learning by competences**, integrated into curricular elements to provide a renewal in teaching practice and in the process of teaching and learning.”

“Competence signifies a **combination of practical skills**, knowledge, motivation, ethical values, attitudes, emotions, and other social and behavioural components that operate together to achieve an effective action. Knowledge in practice is, therefore, viewed as knowledge acquired through active participation in social practices that, as such, can be developed both in a formal educational context, through the curriculum, as well as in non-formal and informal educational contexts.”

“**Competences, therefore are conceptualised as “know-how”** that is applied to a range of academic, social and professional contexts.”

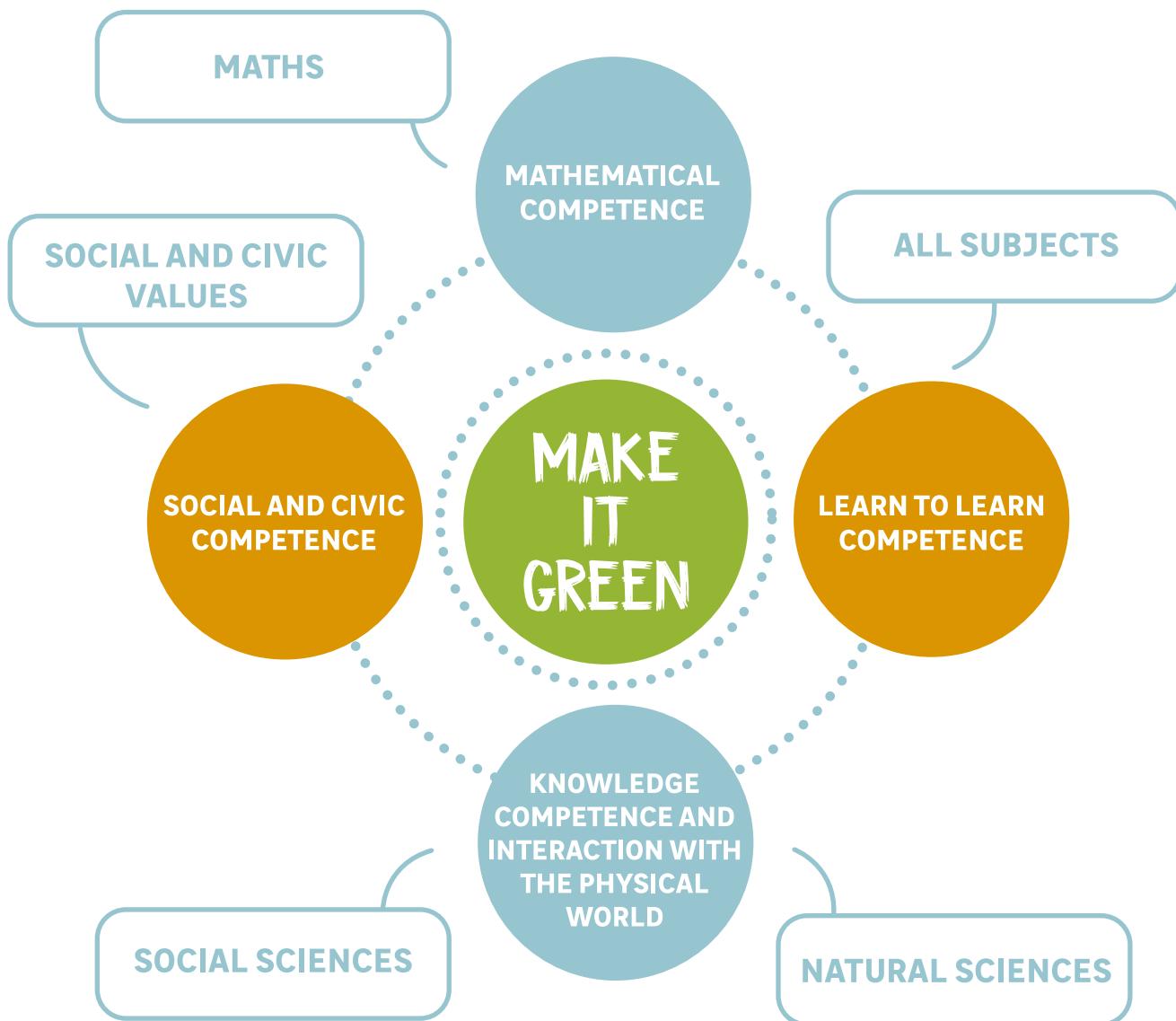
“Primary Education Curricula will incorporate curricular elements related to sustainable development and the environment (...). Educational Administrations will promote measures so that students participate in activities that enable them to consolidate their enterprising spirit and initiative based on aptitudes such as creativity, autonomy, initiative, teamwork, self-confidence and a critical mind.”

## B LINKING THE “MAKE IT GREEN” COMPETITION WITH SUBJECT AREAS AND THEIR CONTENT

SUBJECT AREAS	CONTENT BLOCKS				
Natural Sciences	Developing projects.	Cooperative work.	Sustainable and equitable energy development.	Sources of renewable and non-renewable energy.	
Social Sciences	Use of strategies to encourage cooperative work.	Enterprising initiative. Project planning and management.	Human impact on the environment.	Sustainable development.	Responsible consumption.
Social and Civic Values	Make responsible use of natural assets, understanding and interpreting issues, analysing causes and predicting consequences.	Contribute to environmental conservation maintaining a critical attitude.	Evaluate the responsible use of energy sources on the planet, becoming more aware of respect towards the environment and developing a critical capacity towards events that alter it.		
Maths	Statistical graphs and parameters.	Collection and classification of qualitative and quantitative data.	Critical analysis of information presented using statistical graphs.		

## C LINKING THE “MAKE IT GREEN” VALUES WITH THE SPANISH LOMCE COMPETENCES AND SUBJECTS

Below is a detailed description of the competences and their direct relation with the subjects of the Primary Cycle, using schematic content tables to enable you, as a teacher, to gain an overall view of the curricular scope of the “Make it green” teaching units with the content to be worked on in the subjects shown, and through the corresponding competences.



**D****CONTENT AND COMPETENCE TABLES****SOCIAL SCIENCES**

COMPETENCE	SUB-COMPETENCE	SUBJECT	CONTENT	MAKE IT GREEN
				1 GAME    2 ECOQUEST    3 PROJECT
KNOWLEDGE AND INTERACTION WITH THE PHYSICAL WORLD	Understanding of events and prediction of their consequences.	SOCIAL SCIENCES	<p>Collection of information on the subject in question, using different sources.</p> <p>Development of strategies to organise and retrieve information obtained using different methods and sources.</p> <p>Human impact on the environment.</p> <p>Sustainable development.</p> <p>Problems of contamination.</p> <p>Climate change: causes and consequences.</p> <p>Responsible consumption.</p>	<span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span> <span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span> <span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span>
	Improvement and preservation of the conditions of one's own life, that of other people and other beings.			<span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span> <span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span> <span style="background-color: #c8e6c9; border-radius: 50%; padding: 2px 5px; display: inline-block;">X</span>





C	SUB-COMPETENCE	DESCRIPTORS	CONTENT	MAKE IT GREEN		
				1 GAME	2 ECOQUEST	3 PROJECT
Knowledge and interaction with the physical world	Understanding of events and prediction of their consequences.	Conserve resources and learn to identify and value natural diversity.	Collection of information on the subject in question, using different sources.	x	x	x
		Understand and identify questions or problems and obtain conclusions.	Development of strategies to organise and retrieve information obtained using different methods and sources.	x	x	x
	Improvement and preservation of the conditions of one's own life, that of other people and other beings.	Appreciate the requirements or needs of people, organisations and the environment.	Responsible consumption.	x	x	x
		Interpret information received to predict and make decisions.	Sustainable development.	x	x	x
		Analyse habits of consumption.	Problems of contamination.	x		
		Discuss the impact of one type of life over another in relation to: - The responsible use of natural resources. - Care of the environment. - Good consumption habits.	Climate change: causes and consequences.	x		
		Make decisions on the physical world and on the influence of human activity, with special attention to the care of the environment and rational and responsible consumption.	Human impact on the environment.	x	x	x

## NATURAL SCIENCES

COMPETENCE	SUB-COMPETENCE	SUBJECT	CONTENT	MAKE IT GREEN
				1 GAME    2 ECOQUEST    3 PROJECT
<b>KNOWLEDGE AND INTERACTION WITH THE PHYSICAL WORLD</b>	Knowledge of natural factors and those generated by human actions.	NATURAL SCIENCES	Habits of respect and care towards living beings and the environment.	X                    X
	Improvement and preservation of the conditions of one's own life, that of other people and other beings.		Usefulness of some advances, products and materials for the progress of society.	X                    X                    X
			Sources of renewable and non-renewable energy. Sustainable and equitable energy development.	X                    X                    X



C	SUB-COMPETENCE	DESCRIPTORS	NATURAL SCIENCES	MAKE IT GREEN
			CONTENT	1 GAME    2 ECOQUEST    3 PROJECT
Knowledge and interaction with the physical world	Knowledge of natural factors and those generated by human actions.	Apply technical scientific thought to interpret, predict and make decisions with initiative and personal autonomy.  Communicate conclusions in different contexts (academic, personal and social).	Habits of respect and care towards living beings and the environment.	X                    X                    X
	Improvement and preservation of the conditions of one's own life, that of other people and other beings.	Analyse habits of consumption.  Discuss the impact of one type of life over another in relation to: - The responsible use of natural resources. - Care of the environment. - Good consumption habits.  Make decisions on the physical world and on the influence of human activity, with special attention to the care of the environment and rational and responsible consumption.	Usefulness of some advances, products and materials for the progress of society.	X                                       X
			Sources of renewable and non-renewable energy. Sustainable and equitable energy development.	X                    X                    X

## SOCIAL AND CIVIC VALUES

COMPETENCE	SUB-COMPETENCE	SUBJECT	CONTENT	MAKE IT GREEN
SOCIAL AND CIVIC COMPETENCE	Cooperate and coexist.  Practise democratic citizenship and contribute to improvement.	SOCIAL AND CIVIC VALUES	Understanding and respect in inter-personal relationships.  Coexistence and social values.	1 GAME    2 ECOQUEST    3 PROJECT
				x    x    x



C	SUB-COMPETENCE	DESCRIPTORS	SOCIAL AND CIVIC VALUES	MAKE IT GREEN
SOCIAL AND CIVIC COMPETENCE	Cooperate and coexist.  Practise democratic citizenship and contribute to improvement.	Make decisions and take responsibility for them.  Understand and practise the values of democratic societies: democracy, liberty, equality, solidarity, co-responsibility, participation and citizenship.	Understanding and respect in interpersonal relationships.  Coexistence and social values.	1 GAME    2 ECOQUEST    3 PROJECT
				x    x    x



## MATHS

COMPETENCE	SUB-COMPETENCE	SUBJECT	CONTENT	MAKE IT GREEN
				1 GAME 2 ECOQUEST 3 PROJECT
MATHS	Produce and interpret different types of information.	MATHS	Statistical graphs and parameters. Collection and classification of qualitative and quantitative data. Critical analysis of information presented using statistical graphs. Percentages: expression of fractions using percentages. Resolution of problems of everyday life.	x x x x x x x x x x x x x x x x x x
	Resolve problems related to everyday life and the Social World.			



C	SUB-COMPETENCE	DESCRIPTORS	MATHS	MAKE IT GREEN
				1 GAME 2 ECOQUEST 3 PROJECT
MATHS	Produce and interpret different types of information.	Express and interpret clearly and accurately information, data and arguments.	Statistical graphs and parameters. Collection and classification of qualitative and quantitative data. Critical analysis of information presented using statistical graphs. Percentages: expression of fractions using percentages.	x x x x x x x x x x x x x x x x x x
	Resolve problems related to everyday life and the Social World.	Apply mathematical knowledge to a broad variety of situations, originating from other knowledge fields and everyday life.	Resolution of problems of everyday life.	x x x x x x x x x x x x x x x x x x

## LEARN TO LEARN COMPETENCE

COMPETENCE	SUB-COMPETENCE	SUBJECT	CONTENT	MAKE IT GREEN																								
LEARN TO LEARN	Effectively deal with a set of resources and intellectual work techniques.	SOCIAL SCIENCES	<p>The identity and dignity of the person.</p> <p>Understanding and respect in inter-personal relationships.</p> <p>Coexistence and social values.</p> <p>Use of strategies to strengthen the cohesion of the group and cooperative work.</p> <p>Project planning and management in order to achieve objectives. Enterprising initiative.</p> <p>Project planning and the presentation of reports.</p> <p>Execution of projects.</p>	<table border="1"> <tr> <td>1 GAME</td><td>2 ECOQUEST</td><td>3 PROJECT</td></tr> <tr> <td>X</td><td>X</td><td>X</td></tr> <tr> <td>X</td><td>X</td><td>X</td></tr> <tr> <td>X</td><td>X</td><td>X</td></tr> <tr> <td>X</td><td>X</td><td>X</td></tr> <tr> <td></td><td>X</td><td>X</td></tr> <tr> <td></td><td>X</td><td>X</td></tr> <tr> <td></td><td>X</td><td>X</td></tr> </table>	1 GAME	2 ECOQUEST	3 PROJECT	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X
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C	SUB-COMPETENCE	DESCRIPTORS	CONTENT	SUBJECTS
LEARN TO LEARN	Effectively deal with a set of resources and intellectual work techniques.	<p>Observe and record facts and relationships.</p> <p>Be capable of working in a cooperative manner and through projects.</p>	<p>Project planning and the presentation of reports.</p> <p>Execution of projects.</p> <p>Project planning and management in order to achieve objectives.</p> <p>Use of cooperative work skills.</p>	<p>NATURAL SCIENCES</p> <p>SOCIAL SCIENCES</p> <p>CIVIC AND SOCIAL VALUES</p>

# MONITORING AND EVALUATION SHEETS

To make things easier for you, we are making this teaching material an assessable activity, following evaluation criteria and **assessable learning** standards indicated for each subject.

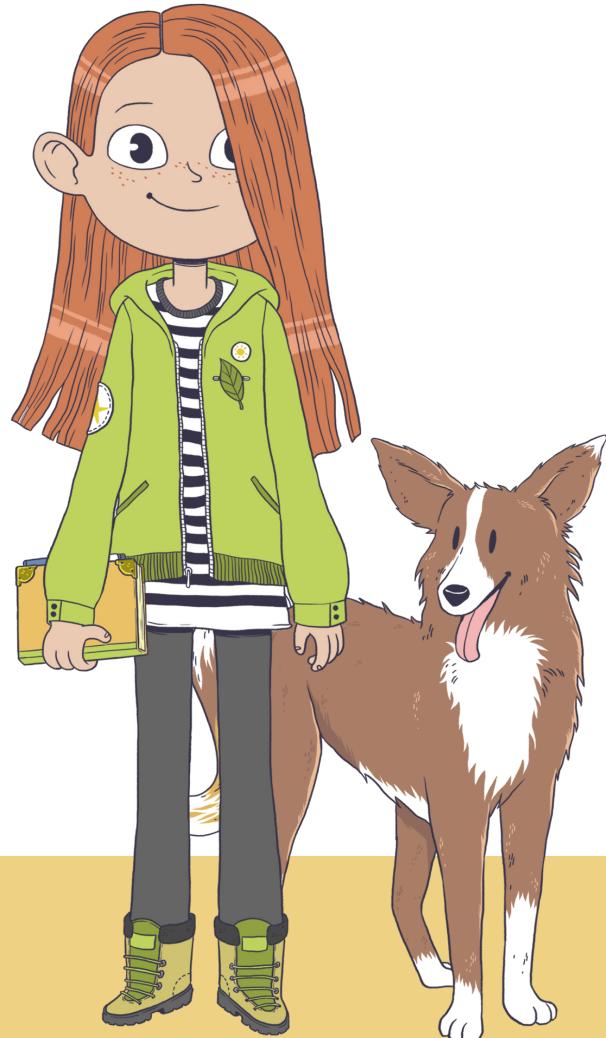
This means that you can evaluate and assess the progress of your students while they are having fun.

Below are the sheets corresponding to each subject: **Social Sciences, Natural Sciences, Social and Civic Values, Maths.**

We also provide you a template sheet with the criteria left blank so that, if you prefer, you can insert the learning standards that best suit your class.

Filling them in is easy: simply write a numerical value (mark) for each criteria (learning standard), add them up and then work out the average. There is even a space to write notes.

This means that while they are enjoying themselves, you have this tool to measure their learning, and, as it is assessable, you can add it to their class marks.



# SOCIAL SCIENCES

<b>MONITORING AND EVALUATION SHEET</b> <b>MAKE IT GREEN</b> <b>SOCIAL SCIENCES</b>	<b>CLASS</b> <b>GROUP</b> <b>.....</b>	<b>ABSENCES</b>	<b>STUDENT GROUP</b>		
			.....	.....	
			.....	.....	
			.....	.....	
<b>ASSESSABLE LEARNING CRITERIA</b>		<b>AVERAGE MARK</b>	<b>TEACHER'S NOTES</b>		
Explains the causes and impact of climate change and responsible actions to slow it down.					
Explains the sustainable use of natural resources, proposing and adapting a series of measures and actions that will lead to an improvement in the environmental conditions of our planet.					
Develops cooperative attitudes and teamwork, evaluates the ideas of others and reacts with intuition, openness and flexibility to them, as well as the custom of taking on new roles in a society in constant change.					
Demonstrates autonomy in the planning and execution of actions and tasks, and shows initiative in decision-making.					
Plans group work, coordinates teams, makes decisions and accepts responsibilities.					
<b>FINAL MARK</b> (make an average of the marks of each assessable criterion)					

# NATURAL SCIENCES

MONITORING AND EVALUATION SHEET		CLASS ..... GROUP .....	ABSENCES	STUDENT GROUP ..... ..... .....
MAKE IT GREEN NATURAL SCIENCES				
ASSESSABLE LEARNING CRITERIA		AVERAGE MARK	TEACHER'S NOTES	
Identifies and explains the benefits and risks related to the use of energy, presenting potential measures for sustainable development.				
Identifies and explains some of the main characteristics of renewable energies, identifying different energy sources.				
Demonstrates autonomy in the planning and execution of actions and tasks, and shows initiative in decision-making, identifying the criteria and consequences of the decisions taken.				
Carries out a project, working in a team and presents a report, using paper and/or digital media, collecting information from different sources, with different media and talking about the experience, with the help of images and written texts.				
<b>FINAL MARK</b> (make an average of the marks of each assessable criterion)				

# SOCIAL AND CIVIC VALUES

MONITORING AND EVALUATION SHEET		CLASS GROUP	ABSENCES	STUDENT GROUP
MAKE IT GREEN				
SOCIAL AND CIVIC VALUES				
ASSESSABLE LEARNING CRITERIA		AVERAGE MARK	TEACHER'S NOTES	
Discusses the meaning of social responsibility. Carries out creative proposals and uses competences to tackle projects on social values.				
Identifies, defines social and civic problems and introduces potentially effective solutions.				
Respects rules whilst working in a team. Uses cooperative work skills.				
Argues the reasons for the conservation of natural assets, proposing initiatives to participate in the correct use of natural assets presenting graphic reasoning to reject contaminating human activities, carrying out creative tasks.				
Is aware of the limitation of energy resources and explains the consequences of the depletion of energy sources, researches the effects of the abuse of certain energy sources.				
Critically investigates the human impact on the environment and communicates the results, discussing approaches for defence and the restoration of ecological balance and conservation of the environment.				
FINAL MARK (make an average of the marks of each assessable criterion)				

# MATHS

MONITORING AND EVALUATION SHEET		CLASS	ABSENCES	STUDENT GROUP				
<b>MAKE IT GREEN</b>  <b>MATHS</b>	.....	<b>GROUP</b>  <table border="1" style="width: 100px; height: 50px;"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>					.....	.....
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ASSESSABLE LEARNING CRITERIA		AVERAGE MARK	TEACHER'S NOTES					
Uses percentages to express fractions. Calculates real situations in percent.								
Draws up and interprets graphs discussing the information presented in statistical graphs.								
Identifies qualitative and quantitative data in familiar situations. Collects and classifies qualitative and quantitative data, from situations in their surroundings.								
<b>FINAL MARK</b> (make an average of the marks of each assessable criterion)								

## Monitoring template sheet

MONITORING AND EVALUATION SHEET		CLASS ..... GROUP .....	ABSENCES	STUDENT GROUP			
MAKE IT GREEN				SUBJECT:		.....	
						.....	
						.....	
ASSESSABLE LEARNING CRITERIA		AVERAGE MARK	TEACHER'S NOTES				
FINAL MARK							
(make an average of the marks of each assessable criterion)							

## WEBOGRAPHY

### SPANISH PRIMARY CYCLE LOMCE:

<http://www.mecd.gob.es/educacion-mecd/mc/lomce/el-curriculo/-curriculo-primaria-eso-bachillerato.html>

### KEY COMPETENCES:

<https://www.boe.es/boe/dias/2015/01/29/pdfs/BOE-A-2015-738.pdf>  
<http://www.mecd.gob.es/mecd/educacion-mecd/mc/lomce/el-curriculo/curriculo-primaria-eso-bachillerato/competencias-clave/competencias-clave.html>

### SUB-COMPETENCES AND DESCRIPTORS:

[http://usie.es/encuen/com\\_ponde.pdf](http://usie.es/encuen/com_ponde.pdf)

