

MAKE IT GREEN



TEACHING UNIT 1

“THE PATROLLER’S TRAIL”

PREPARATION OF ACTIVITY 1

In the following we show you the steps to follow to make this educational activity a resounding success!

1 TEAM ORGANISATION

To play, we suggest that you organise your class into 5 teams. You can organise these as you wish.

The criterion of the game is “coop-titive”: that is, that they will be playing in a cooperative way, but when competing, this will be within the knowledge boundaries of each group.

Each team will be allocated a **tile** (characters from Vega and her gang).

Each team has to give itself a name and have a battle cry related to the environment. Each time the team gets a question right they have to stand up and shout out their battle cry!

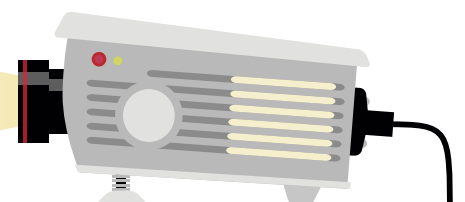
2 BOARD GAME / BOARD

2.1 WHITEBOARD

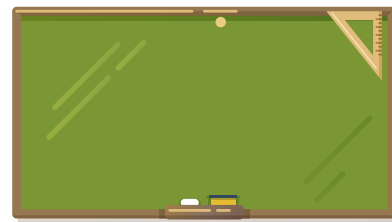
You have two options depending on the type of board in your classroom.

If your classroom has a digital whiteboard or projector, project the game onto the whiteboard/projector. You, as the teacher, will be the moderator and the person who reads the questions.

This option is the most sustainable, as it does not involve any waste from using printers, ink or paper.



If your classroom has a traditional whiteboard, print the game to a size that permits it to be viewed correctly and attach it to the whiteboard. You, as the teacher, will be the moderator and the person who reads the questions.



2.2 THE BOARD

You will see that the board is similar to the Game of the Goose but works like Trivial Pursuit.

Playing is very simple, and there are also **special spaces** that are explained below:



ECO space

When you land on one of these spaces, you automatically move to the next of the same type, just like in the Goose game. “And I throw because it's my turn!” (throw the die again).

LIGHTBULB



RECYCLING



WATER



TOXIC space

When you land on this space you lose a go as you have to clean up all the waste.

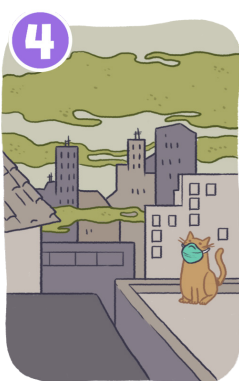


WASTE space

If you land here you have to go back to Start, as your guilty conscience has made you go back to the beginning.

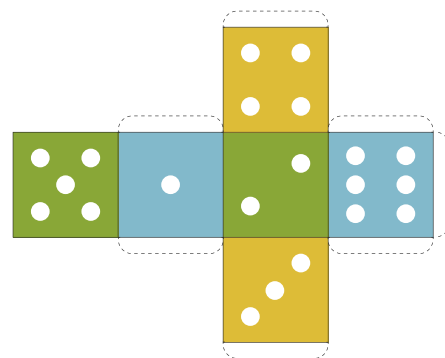
The board also has **sustainable and wasteful spaces** (see board). If you land on one with a positive effect, you go forward a space. If, however, you land on one with a negative effect, you go back two spaces.

Waste spaces



3

BOARD GAME / PLAYERS' TILES



4

BOARD GAME / CARDS

You will see that there are three questions on each card. As the moderator, you, the teacher, decide which question to put to the team: we recommend that, on each turn, you alternate the type of question to make the game more fun, as there are miming questions, drawing questions, etc.



Relational or conceptual type

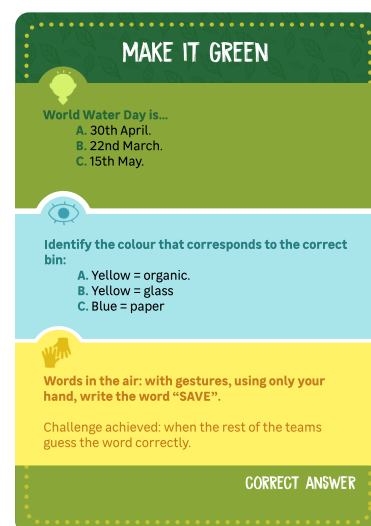
(cause-effect): handling statistical data, percentages, etc., and the “Did you know...” type as knowledge management.



Visual type: drawing pictograms, logos, symbols, etc.



Kinesthetic type: depicting concepts, imitating noises, etc.

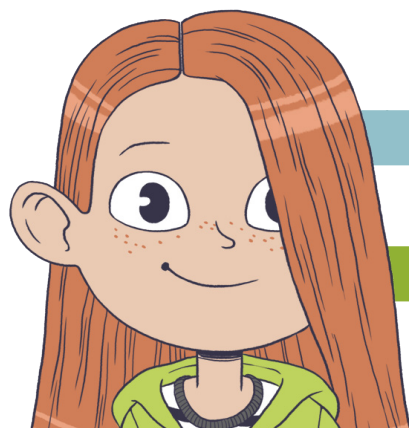


5

PREPARATION PRIOR TO THE START OF THE GAME

We give you three ideas and five videos to work on the topic.

We suggest that before starting, you begin a brief, introductory talk to get a discussion going on the need to act and raise awareness.



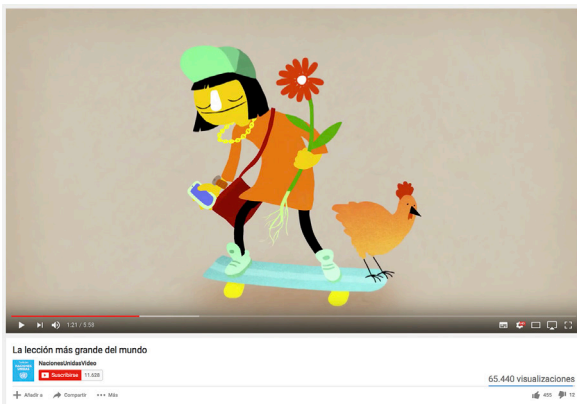
22nd March: WORLD WATER DAY

22nd April: EARTH DAY

5th June: WORLD ENVIRONMENT DAY

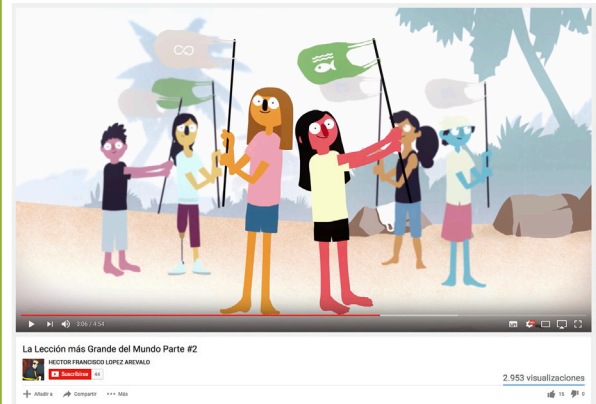
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And as a reference framework, we suggest these 5 videos to choose from:



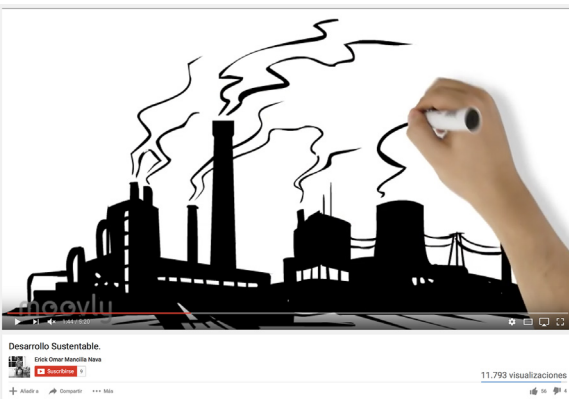
United Nations video “The World's Largest Lesson” Part 1

<https://www.youtube.com/watch?v=iLjFg-xUzaQ>



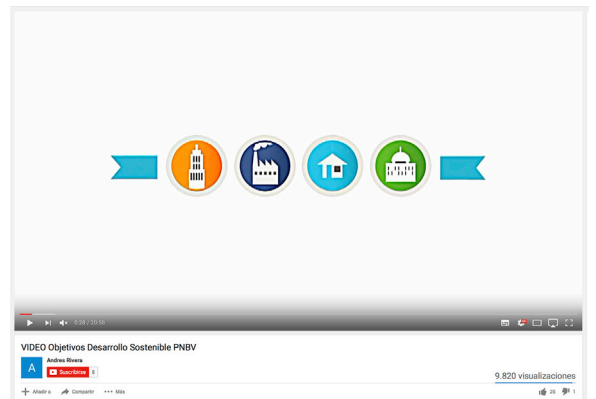
United Nations video “The World's Largest Lesson” Part 2

https://www.youtube.com/watch?v=_RvYomSCdNk



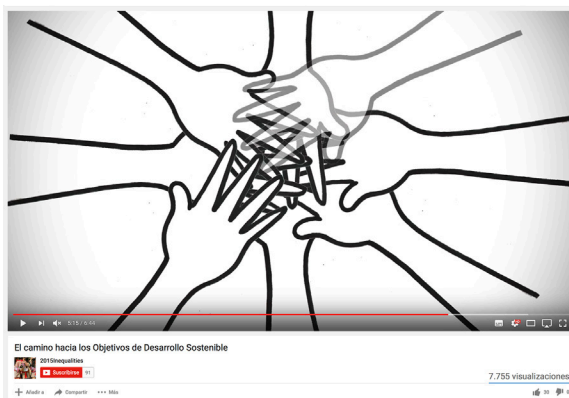
Cartoon explaining the benefits of sustainable development.

<https://www.youtube.com/watch?v=i4VIXYmtJQs>



Sustainable Development Goals set out by the United Nations.

https://www.youtube.com/watch?v=zDUODk_OBVA



Animation created with children's drawings with an explanation in English with Spanish subtitles.

https://www.youtube.com/watch?v=z--NgagK2_Y



- 1 The player throws the die and moves their tile to the corresponding space.
- 2 The moderator (in this case the teacher) takes a card from the pile and reads a question, choosing from the three that appear on the card.
- 3 If the team answers correctly, they throw the die again.
- 4 If the team answers correctly, one of its members gets up to move the tile on the board, while the rest of the team shout out their battle cry.
- 5 If they do not answer correctly, they do not move forward. The next time this team answers incorrectly, they will have to move back 3 spaces.
- 6 If a team does not answer correctly, the question goes to the next team.
- 7 If they land on the penalty spaces (negative effect), they go back two spaces.
- 8 If they land on the sustainable spaces (positive effect), they move forward one space, providing they answer correctly.
- 9 If they land on the special spaces, they must follow the rules attributed to these.
- 10 The first one to reach the centre space (Environment Embassy) will have to wait for the other teams to arrive, continuing to answer the questions whenever it is their turn.

We recommend that, once the game is finished, you allow around **10 minutes' joint reflection** for the assimilation of the cross-cutting concepts learned.

The game has been designed to last the length of a lesson (around 45-50 minutes), but it can nevertheless be played during one or several lessons, and the activity presented as a daily, weekly or whenever-you-like - activity!

7

WEBOGRAPHY

GAMIFICATION:

<http://www.gamificacion.com/que-es-la-gamificacion>

<http://www.gamificacion.com/>

<http://justificaturespuesta.com/gamificacion-7-claves-para-entender-que-es-y-como-funciona/>

<http://www.educaciontrespuntocero.com/recursos/herramientas-gamificacion-educacion/33094.html>

<http://www.educativa.com/blog-articulos/gamificacion-el-aprendizaje-divertido/>

GAME CARD QUESTIONS:

Practical energy guide (Spanish Ministry of Industry. idea)

https://www.urjc.es/images/EstudiarURJC/vida_universitaria/compromiso_social/sostenibilidad/Guia%20Practica%20Energia.pdf

<http://www.reciclame.info/>

YOUTUBE VIDEOS:

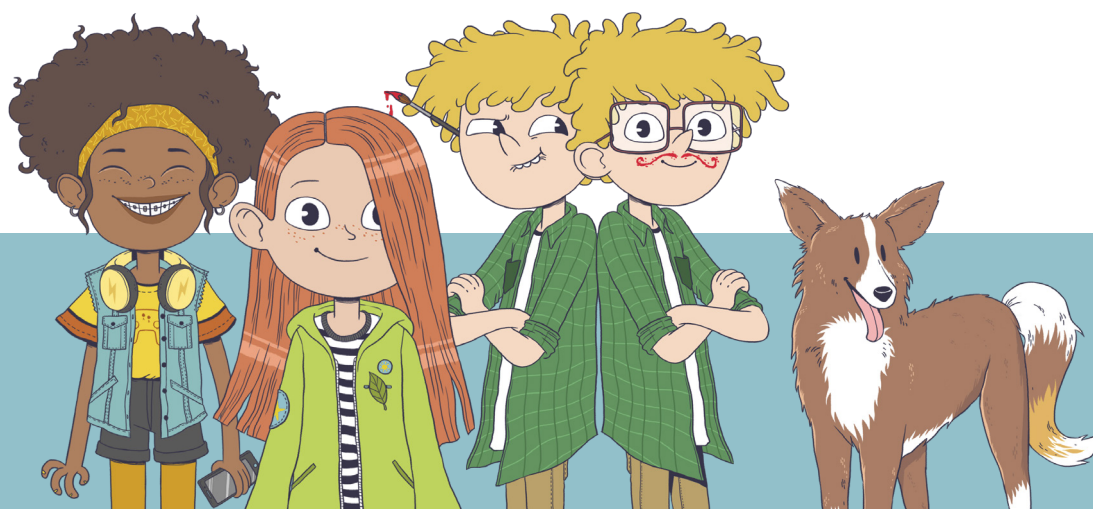
History of sustainable development

<https://www.youtube.com/watch?v=LQ1fQLeUYv0&t=22s>

Goals for 2030 for the climate and energy

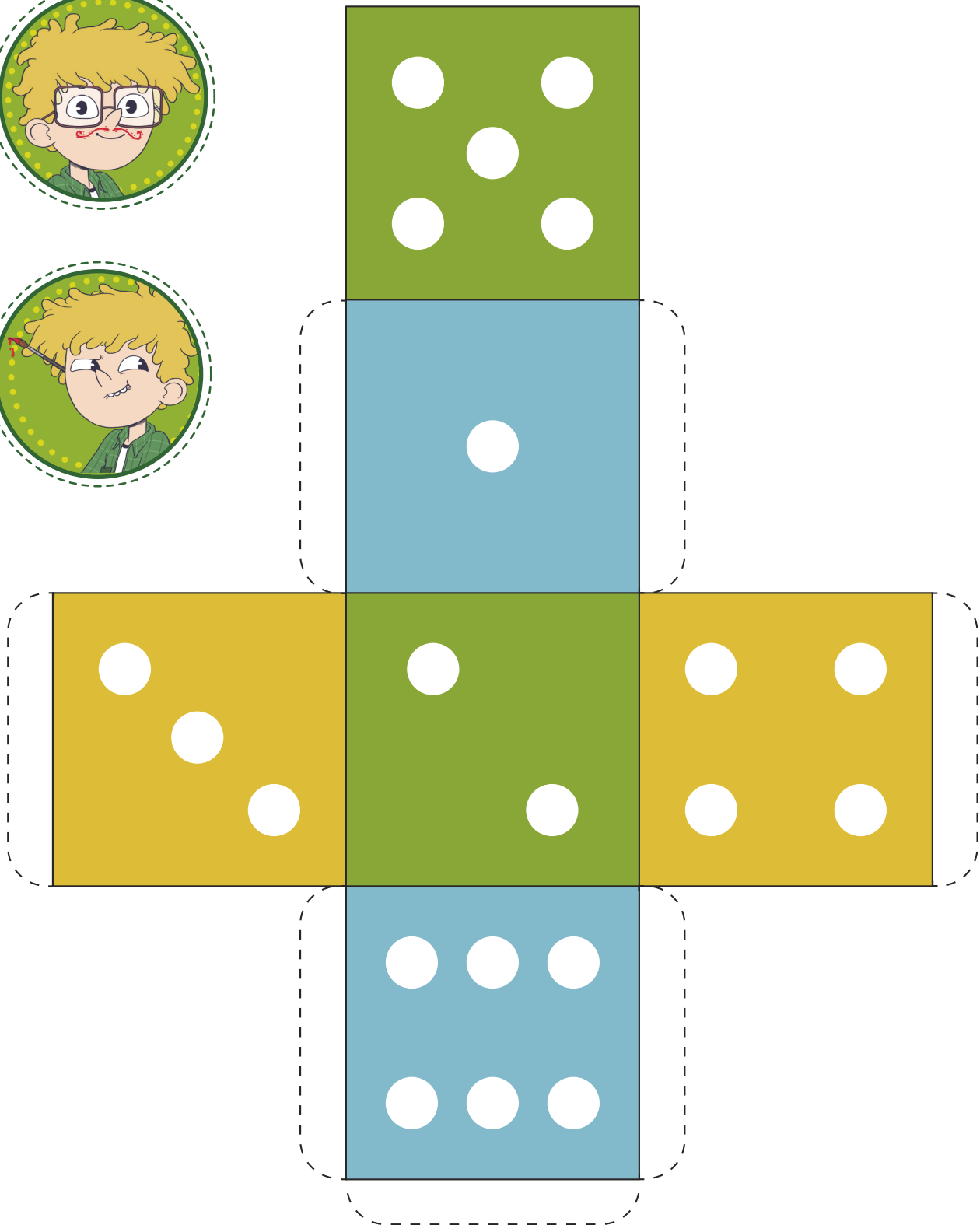
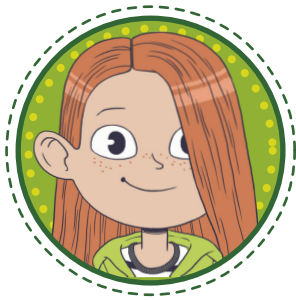
<https://www.youtube.com/watch?v=isKsIKfFluU>

https://www.youtube.com/watch?v=zDUODk_OBVA&t=13s





PLAYER TILES AND DIE - Appendix 2



MAKE IT GREEN**World Water Day is...**

- A. 30th April.
- B. 22nd March.
- C. 15th May.

**Identify the colour that corresponds to the correct bin:**

- A. Yellow = organic.
- B. Yellow = glass
- C. Blue = paper

**Words in the air: with gestures, using only your hand, write the word "SAVE".**

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)B 2)C

MAKE IT GREEN**World Earth Day is...**

- A. 30th April.
- B. 22nd March.
- C. 22nd April.

**What is the drawing that appears on the recycling logo?**

- A. A sheet of paper.
- B. An arrow.
- C. A capital "R".

**Words in the air: with gestures, using only your hand, write the word "ENERGY".**

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)C 2)B

MAKE IT GREEN**World Environment Day is...**

- A. 30th June.
- B. 22nd March.
- C. 5th June.

**In one minute, draw an original symbol to represent recycling.**

The student can describe the symbol without the need to draw it.

**Words in the air: with gestures, using only your hand, write the word "LIGHTBULB".**

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)C

MAKE IT GREEN**Do you know how much water you save when you turn off the tap while brushing your teeth?**

- A. 2 litres water.
- B. 5 litres water.
- C. 10 litres water.

**In one minute, draw a symbol to turn off the taps at school.**

The student can describe the symbol without the need to draw it.

**Miming challenge: in one minute and as a team, act out the concept "WIND ENERGY".**

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)C

MAKE IT GREEN

How much rubbish does a Spanish person generate in one year?

- A. 150 kg.
- B. 600 kg.
- C. 250kg.



In one minute, list the objects in class that have no further use, recycling them and giving them other uses.

Evaluate the imagination and creativity shown in applying new uses.



Miming challenge: in one minute and as a team, act out the concept "SOLAR ENERGY".

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)B

MAKE IT GREEN

On a lightbulb, what does the letter "W" stand for?

- A. "W" for "Watt".
- B. "W" for "Well".
- C. It is the letter of the brand name.



In one minute, list all the new uses you can think of for an old plant pot.

Evaluate the imagination and creativity shown in applying new uses.



Riddle: "I rise in the morning but not from a bed, I provide light but I'm not a candle, I'm a star but I'm not a celebrity. Who am I?"

Correct answer: the sun.

CORRECT ANSWER

1)A

MAKE IT GREEN

Why do we say you should water plants at night?

- A. Because they absorb more water then than during the day.
- B. Because the moon helps the plants to grow.
- C. Because we avoid water loss through evaporation because of the sun.



In one minute, tell us which objects in class should be put in the yellow bin.

Correct answer: containers and plastics go in the yellow bin.



1,2,3, ecology is key! Within one minute and as a team, tell us as many objects as you can that go in the yellow bin, such as, for example, "Tetra Pak cartons".

Correct answers: yoghurt pot lids, plastic bottles, biscuit wrappers, etc.

CORRECT ANSWER

1)C

MAKE IT GREEN

For each sheet of paper that we recycle, we save...

- A. 35% water and 65% energy.
- B. 17% water and 25% energy.
- C. 86% water and 65% energy.



In one minute, tell us which objects in class should be put in the blue bin.

Correct answer: paper and cardboard go in the blue bin.



Invent a rap! Make up a rap with the following sentence: "IF WE ALL RECYCLE TOGETHER..." (Remember you should end it with a rhyme).

Challenge achieved: finish the sentence with a rhyme, such as, for example, "WEATHER", "EVER", "FOREVER", "LEATHER", "FEATHER", etc.

CORRECT ANSWER

1)C

MAKE IT GREEN

What saves more: washing dishes by hand or using a dishwasher?

- A. Washing by hand.
- B. Dishwasher.
- C. Both the same.

List the main sources of renewable energy.

Correct answer: Solar (sun), Wind, Hydraulic (water).

Invent a rap! Make up a rap with the following sentence: "IF WE SAVE WATER..." (Remember you should end it with a rhyme).

Challenge achieved: finish the sentence with a rhyme, such as "DAUGHTER", "HOTTER", "OUGHT TO", "SLAUGHTER", etc.

CORRECT ANSWER

1) B. Dishwasher. You save up to 30.6 litres a day.

MAKE IT GREEN

How much water do you save by having a shower rather than a bath?

- A. 75 %
- B. 25 %
- C. 50 %

Do you know the "4Rs" rule?

- A. Reduce, re-use, recycle, recover.
- B. Rebuild, recover, recycle, reinstate.
- C. Rescue, retrieve, remodel, recycle.

Invent a rap! Make up a rap with the following sentence: "WE ALL SUPPORT THE ENVIRONMENT..." (Remember you should end it with a rhyme).

Challenge achieved: finish the sentence with a rhyme, such as "EXCELLENT", "IMPRISONMENT", "DECADENT", etc.

CORRECT ANSWER

1) C 2) A

MAKE IT GREEN

Knowing that a leaking tap loses around 30 litres of water a day, how much would it lose in a month?

In one minute, invent different uses that you could give to a plastic bottle.

Correct answer: the possibilities are infinite thanks to your imagination. You could make plant pots, pots for pens, a mini-kitchen garden, etc.

1,2,3, ecology is key! Within one minute and as a team, tell us as many words as you can related to renewable energies, such as, for example "DAM".

Correct answers: wind turbine, hydroelectric dam, solar panel, etc.

CORRECT ANSWER

Approx. 900 litres a month.

MAKE IT GREEN

How much water does a running tap consume in a minute?

- A. 6 litres per minute.
- B. 1 litre per minute.
- C. 0.5 litre per minute.

1,2,3, ecology is key! Within one minute and as a team, tell us as many objects as you can that go in the blue bin, such as, for example, a newspaper, etc.

Correct answers: shoeboxes, an old, broken book, used notebooks, etc.

Miming challenge: in one minute and as a team, act out the concept "ENERGY SAVINGS".

Challenge achieved: when the rest of the teams guess the concept correctly.

CORRECT ANSWER


1) A

MAKE IT GREEN



What is an “aerator”?

- A. It is a type of air-conditioning.
- B. It is used to limit the amount of water that comes out of a tap.
- C. It is a purifier that helps you breathe better at home.



What is the drawing that appears on the recycling logo?

- A. A sheet of paper.
- B. An arrow.
- C. A capital “R”.



Miming challenge: in one minute and as a team, act out the concept “BIODIVERSITY”.

Challenge achieved: when the rest of the teams guess the concept correctly.

CORRECT ANSWER

1)B 2)B

MAKE IT GREEN



Why is thermal insulation important in windows?

- A. Without it, 18% heat is lost.
- B. Without it, 30% heat is lost.
- C. Without it, more than 45% heat is lost.



In one minute, list all the new uses you can think of for an old plant pot.

Evaluate the imagination and creativity shown in applying new uses.



Words in the air: with gestures, using only your hand, write the word “SUSTAINABLE”.

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)B

MAKE IT GREEN



Of ALL the energy consumed in Spain, how much is used by families?

- A. 22%.
- B. 63%.
- C. 30%.



In one minute, tell us which objects in class should be put in the yellow bin.

Correct answer: containers and plastics go in the yellow bin.



Words in the air: with gestures, using only your hand, write the word “WASTE”.

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER


1)C

MAKE IT GREEN



Classify in order (greatest consumption to least consumption) the following light sources:

- A. LED, fluorescent, incandescent.
- B. Fluorescent, LED, incandescent.
- C. Incandescent, fluorescent, LED.



In one minute, tell us which objects in class should be put in the blue bin.

Correct answer: paper and cardboard go in the blue bin.



Miming challenge: in one minute and as a team, act out the concept “WIND ENERGY”.

Challenge achieved: when the rest of the teams guess the word correctly.

CORRECT ANSWER

1)C