Every Drop Counts

Lesson 1 (before the beginning of this, students must fill in a questionnaire)

1st Activity
Time: 10 min
Type of activity: free discussion about the result of the questionnaire
Class organization: discussion in class
Actions/Tasks: The teacher presents the results of the questionnaire that the students have filled in. The terms water footprint and bad habits are mentioned as well as important ways to reduce water.

2nd Activity
Time: 20 min
Type of activity: video presentation
https://www.youtube.com/watch?v=2W_VvzB_6yQ
What is water footprint and why is it important?
The difference between what we want and what we need
Class organization: classwork
Actions/Tasks: The teacher shows an educational video "What is your water footprint" that has connection to the topic, explaining the concept of water footprint. Teacher asks students to fill in a task sheet related to the quantity of water needed to produce beef, pork, cheese, and fruit, a smartphone, a tyre or a ton of cement. The terms consumption and waste are explained. Attention is drawn to the statement "Knowing your water footprint and making an effort to reduce it can really make a difference"

3rd Activity
Time: 15 min
Type of activity: filling in a worksheet
Class organization: groupwork
Actions/Tasks: Students are asked to calculate the amount of water consumed in 24 hours (i.e. washing their hands, having a shower, drinking a glass of water, brushing their teeth, flushing the toilet, having a shower, etc.). These topics are explored on www.watercalculator.org. They need to trace their foot and cut the piece of paper or cardboard which they will then write on every activity with the amount of water used. They may recall that it is not their household's indoor or outdoor water used but rather their virtual water used and particularly their diet – that makes up most of their water footprint. Teacher explains that for most people diet is the biggest consumer of virtual water. In fact, in a typical person's water footprint it is known that approximately two thirds of the water comes from virtual water needed to produce food. Therefore, investing a little time into understanding why our diet has such a large water footprint is the aim of this lesson. Teacher discusses what can be done to reduce the amount of water we consume.

Lesson 2
1st Activity
Time: 15 min
Type of activity: Discussion
Class organization: Whole class
Actions/Tasks: Teacher quizzes the students on energy, renewable resources, water pollution and more issues related to our environment. The purpose of this activity is to give students an idea on how to put a design problem into perspective. In this case the class will explore the surprising amount of water used in producing everyday products like coke, chocolate bars, smart phones, t-shirts.The teacher explains the term supply chain- all the resources and the people involved in the production of a good, from growing and harvesting the materials to make it, to selling a product in a store. https://www.youtube.com/watch?v=UBSOiHUctrY
Question: How much water goes into a bottle of Cola? https://www.coca-colaindia.com/choices/whats-in-a-coke-infographic
A surprising amount of water is hidden in a chocolate bar. The teacher explains students that it takes an astonishing 450 gallons (1700 liters) of water to make a typical 3.5-ounce (100-gram) chocolate bar. That's about ten bathtubs of water for one bar of chocolate.

Most of those gallons are consumed by the cocoa plants in the field. As with other products of the land – from coffee to cotton shirts – it's the water needed for plant growth that typically accounts for the biggest portion of that item's water footprint.
https://www.youtube.com/watch?v=xEExMcjSkwA

2nd Activity
Time: 20 min
Type of activity: class discussion
Class organization: groupwork
Actions/Tasks: Students will work in groups where each group decide on a leader to be the manager for a company that produces chocolate bars, items of clothing, Teacher sets the context for this activity – there is an increasing demand for fresh water and as a result a decrease in the supply of it. To be seen as an environmentally responsible manager of his company he has to find ways to redesign their production to reduce water.

3rd Activity
Time: 10 min
Type of activity: Class presentation
Class organization: All groups
Actions/Tasks: Students will be briefly sharing their solutions of using too much water when producing certain goods. Teacher explains how the solutions they found can make 'their companies' be seen like environmentally friendly and responsible.

Lesson 3

1st Activity
Time: 10 min
Type of activity: Model analysis
Class organization: whole class
Actions/Tasks: Teacher hands out a model of an essay suggesting sollutions to problems. Students have to match the paragraphs (A-D) with the headings (1-4)
P1-state the problem and cause
P2-first suggestion and expected result
P3-second suggestion and expected result
P4-summarise your opinion

2nd Activity
Time: 20
Type of activity: Making suggestions
Class organization: whole class
Actions/Tasks: Teacher explains them how suggestions are made, what language is used for this and asks them to rewrite some sentences in the model analysis with other words or phrases with same meanings:
A useful suggestion would be to…By doing this…
It would be a good idea if…Therefore/ As a consequence
Another way to solve the problem would be to…In this way/By doing this….

3rd Activity
Time: 15
Type of activity: Diagram completion
Class organization: pair work
Actions/Tasks: Teacher gives the students a diagram that contains:
Solution 1/example/expected results.
Solution2/example/expected results
Students come up with their own ideas to fill in the diagram and present their ideas to the whole class. After many solutions are discussed they are asked to write as homework an essay suggesting solutions to problems using the plan they have been taught.

Follow up activity
Activating your vocabulary- Take your idioms with water!
Matching exercise: Match the idioms with their meanings.
Whole class discussion: Have you ever felt like a fish out of water?
What makes your mouth water?
Are you someone who likes to make waves? (see attached worksheet)

Water value

How much does it take

1 Apple	_____	1 Kg of cheese	_____
1 Watermelon	_____	1 Kg of pork	_____
1 Kg of tomatoes	_____	1 tyre	_____
1 Kg of bananas	_____	1 ton of cement	_____

Water-rich foods that will help you stay hydrated

- Cucumber, 96% **water**. Cucumbers are made up of 96% **water** – that's the highest **water** content of any **food**. ...
- Tomatoes, 95% **water**. Tomatoes are made up of 95% **water**. ...
- Spinach, 93% **water**. ...
- Broccoli, 90% **water**. ...
- Brussel sprouts, 88% **water**. ...
- Oranges, 86% **water**. ...
- Apples, 85% **water**.

Take your idioms with water

Warm – up activity

Have you ever been in hot water?

Matching exercise:

1. be in hot water
2. come hell or high water
3. make your mouth water
4. keep your head above water
5. throw cold water on (something)
6. make waves
7. test the waters
8. dead in the water
9. water under the bridge

a. an unpleasant situation that happened a long time ago and is no longer a source of concern

b. try something to see what it's like

c. make you want to eat something)

d. be in trouble

f. keep up with your work

g.for sure; whatever happens

h. having no chance for success

i. criticize something that someone else is enthusiastic about

j. make trouble or cause a disturbance

Fill in the gaps:

Complete the expressions below without looking at the answers above.

1. _____the waters
2. _____ cold water on (something)
3. be in _____ water
4. water under the _____
5. _____ in the water
6. make your _____ water

Discussion

1. Do you ever have trouble keeping your head above water?
2. Have you ever had someone throw cold water on your plans?
3. What makes your mouth water?
4. Are you someone who likes to make waves?
5. What's something you would like to accomplish, come hell or high water?
6. Can you think of a time when you tested the waters before doing something?
7. Can you think of any expressions in your own language involving water? Translate the expression(s) into English.
8. Have you ever felt like a fish out of water?

 1000 **litres** BEANS	 BEANS
375 **litres**  RICE	 RICE
274 **litres**  BREAD	 BREAD
865 **litres**  CHICKEN	 CHICKEN
80 **litres**  ORANGE	 ORANGE
126 **litres**  APPLE	 APPLE

WATER, WATER EVERYWHERE

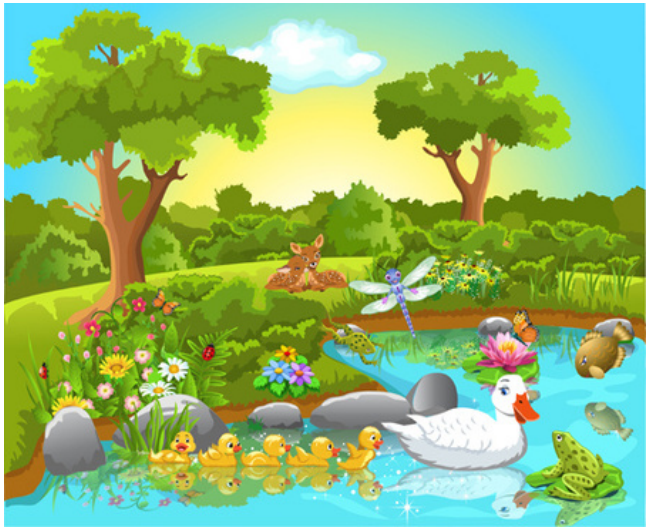
Water is a global resource.
But what does that mean?

It means that it is something we all share: All people in the world and nature.

Everyone has the right to clean water

However, only one out of 10 people in the world have access to safe drinking water

Wildlife depends on clean water and all living beings survival is dependent on water



This means that **we are all responsible for taking good care of water and not wasting it!**