

Topic 5- Water and Life (Key Stage 2)

English voice over script and super:

Super: Topic 5 Water and Life Key Stage 2

FVO: Topic 5 Water and Life Key Stage 2

Super: Water-saving Taskforce

Water Save Dave: Hello Water-saving Taskforce, it's time for us to take action again!

Our mission today is to spot and stop water-wasting habits in families and the community!

Girl & Boy: Roger that!

Girl: Oh No! Look at that house! They are wasting so much water already at the beginning of the day...

Water Save Dave: Let's go and take a look.

Resident: Hey, can't you see that I'm brushing my teeth? Why did you turn off my tap?

Water Save Dave: Don't you know that the world is facing a water crisis? If you keep brushing your teeth in this way, you will waste a lot of water!

Resident: I just simply brush my teeth with a running tap! How is it related to the "water crisis"?

Super:

Water crisis

Insufficient water resources

Water Save Dave: Water crisis is a situation that the available water resources are insufficient to meet the demand of all people. If you leave the tap on while you are not using it, a lot of water is wasted, and so you will become one of the "big wasters" contributing to the water crisis!

Resident: No way! You must be exaggerating.

Super:

2/3 Earth's surface is water-covered

Fresh water

2.5%

Less than 1%

Water Save Dave: Not at all! Let's have a look at the world map here. Although more than two thirds of the Earth's surface is water-covered, the truth is, most of the water you see is seawater, whereas only 2.5% of water on Earth is fresh water. Even then, just less than 1% of the fresh water is easily accessible by people. Of the remaining fresh water, it is locked away in ice caps or glaciers.

Super:

100 glasses

Less than 1 glass

Resident: So... you're saying that, if we have a hundred glasses of water, we can only use less than one glass of water?

Super:

Population

Water demand

disrupted

2025

Water Save Dave: That's right! The world's population grows rapidly which leads to the great increase in water demand. However, due to the climate change, it increases the risk of both flooding and droughts. All these extreme weathers have disrupted the water cycle, and polluted the water sources which reduce the available fresh water resources. Therefore, the world is facing the threat of water shortages. Many people in developing countries get sick because of drinking polluted water, and some of them may even lose their lives! If we don't take any preventive measures, half of the world's population will be living in water-stressed areas by 2025!

Resident: I...I...didn't know it can be that serious! I now realise it is a blessing to have access to safe and readily available water from our taps... I'm so sorry for my mistake!

Water Save Dave: It's alright. Just bear in mind not to make the same mistake. Bye bye!

Boy: Great! I guess we have arrived another home. Let me check if they have wasted any water...

Girl: I noticed something. Excuse me, madam. How come you wash the vegetables under a running tap? This can waste a lot of water! You should wash them in the sink or container filled with water instead, it can also help to remove the pesticides.

Lady: Yeah, but... I'm not used to washing vegetables in that way. In addition, I can get plenty of water every day from the tap, and Hong Kong has no water shortage issues, I can't see the necessity to save water.

Super:

Mon

Tue

Wed

Thu

Fri

Sat

Sun

Water Save Dave: I am afraid that's not true... As you can see, the weather fluctuates a lot in recent years. It can be very hot and sunny for a very long time, or there may be rainstorms and typhoons for a few days continuously! In fact, the Hong Kong Observatory has already predicted that the climate change experienced in Hong Kong will further intensify, and days of extreme weather such as dry weathers or rainstorms will become more frequent in the near future. These extreme weathers can directly affect the rainwater collection and the source of Dongjiang water.

Lady: Well, I understand the part about dry weather, but won't we collect more water due to rainstorms?

Water Save Dave: Heavy pouring rain is definitely not ideal for rainwater collection. Imagine when you are pouring excessive water into a glass in a very short time, the water will overflow easily and it won't be able to retain all the water in the glass.

Lady: I see.....I thought there is no need to worry about water shortage in a well-developed place like Hong Kong.

Super:

Regions like Dongguan and Huizhou  
Dongjiang water

Water Save Dave: Our local yield and Dongjiang water supply are getting more unstable due to climate change, and the rapid growth of population and economic development has also led to a continuous increase in water demand. Furthermore, as the populations of regions which are relying on Dongjiang water such as Dongguan and Huizhou are increasing, the competition for water resources across the Pearl River Delta in the future would increase and impact water supply from Dongjiang. In fact, the water resources in Dongjiang river have apparently reduced in recent years, therefore we should better prepare for future uncertainties, and build up a habit of saving water so as to contribute to the sustainable development of our society.

Lady: I'm really sorry, I promise I will not wash the vegetables under a running tap next time.

Water Save Dave: This can also apply to defrosting. Remember to defrost the food overnight inside the refrigerator instead of under running water.

Lady: Sure!

Girl: Look, the students are having their lunch now!

Boy: Wait a minute... Hey there, why did you just throw away your lunchbox? There's still a lot of beef and rice inside!

Student: That's because I ate too much snacks during the break time, so I'm not hungry now.

Water Save Dave: But do you know that you did not only waste the food you just threw away, but also a large amount of "virtual water"!

Girl: Dave, what is "virtual water"?

Super:

Virtual water

Water Save Dave: We need water for cleansing and cooking in our daily life. However, the amount of water we consume is far more than what we see because a large quantity of water is hidden, which is the amount of water used in the food production and transporting goods, this is what we called “virtual water”.

Student: I still don't quite understand...

Super:

1 KG

1000 L

Virtual water

1000 L

Water Save Dave: For example, to produce a kilogram of wheat, we need about a thousand litres of water, therefore the amount of “virtual water” used to produce a kilogram of wheat is 1,000 litres. Let's use beef as an example this time. Can you guess where the water is being used during the production of beef?

Student: Production of beef...? Using water...

Water Save Dave: Okay, here's a hint. To produce beef, you'd have to graze cattle. What do cattle need?

Student: Food, of course.

Super:

Drinking

Bathing

Clean the barns

1kg of beef

Water Save Dave: Right. And besides, they need to consume tons of water for drinking and bathing, also we have to clean their barns. So, guess how much water is used to produce a kilogram of beef?

Student: Um... I really have no idea.

Super:

15455 L

Water Save Dave: The answer is... 15,455 litres of "virtual water"! That's already enough to fill up a container, and we still haven't taken the water for transportation into account.

Girl: Whoa! That means... you did not only throw away the beef, but you also threw away a lot of water!

Student: Don't scare me, I feel guilty now...

Boy: Then are we wasting a lot of water to eat beef?

Super:

130 L

15455 L

Water Save Dave: In some sense, yes. That's why it is recommended to eat more vegetables and less meat, because the production of vegetables uses much less "virtual water" than meat. A kilogram of lettuce uses only 130 litres of "virtual water" for its production, which is less than what we have just mentioned for the beef.

Student: I get it now. In order to save more water, we should treasure the food, eat more vegetables and less meat.

Water Save Dave: Exactly. Eating more vegetables and less meat is also good for our health. We, Water-saving Taskforce, it's time to go to another place!

Boy: Looks like we're at a restaurant now.

Girl: It's a buffet, look at all the different kinds of food!

Kid: Excuse me, can you change the spoon for me?

Mum A: Can you please fill up my glass with water as well please?

Water Save Dave: Hold on! You guys are wasting too much water!

Kid: What? I just asked to change a new spoon only.

Boy: For every extra piece of tableware you use, the more water is needed to wash it. If everyone in this restaurant changes their tableware after each course, that will use a large amount of extra water. Just as you did just now, you changed your spoon right after you finished having your soup. That is a water-wasting habit indeed.

Water Save Dave: One more thing, Madam. Just now you asked the waiter to fill up your glass with water, but I noticed that you were mainly drinking juice instead of water and your glass was quite full already. Remember in order not to waste the drinking water, please only request for water when needed.

Mum A: Yes, I understand now, thanks for the reminder!

Water Save Dave: No problems, that's our job. It's time for us to leave, we've got one last case to handle. Bye!

Boy: Oh dear, why do they look so troubled?

Water Save Dave: Let's go and have a look.

Girl: Hi there, we are the Water-saving Taskforce. Are you having problems related to water conservation?

Dad B: Oh yes, how did you know that?

Water Save Dave: We can sense it.

Mum B: Oh... The water bill this month is so expensive, so we were just thinking of how to use less water...

Boy: That's easy! Apart from turning off the tap while not using it, there are still many other means. For example, you can keep the water which has been used for washing the vegetables for watering.

Super:  
dehumidifier

Girl: In addition to re-using the water from washing vegetables and rice, you can also reuse the water collected from the dehumidifier for mopping the floor, or toilet flushing. Therefore, remember not to pour away the water collected from the dehumidifier next time, even though it looks like waste, but it is much more useful than you think!

Water Save Dave: When you use the washing machine and dishwasher, try to run them with a full load of clothes or dishes, so you can save water and electricity at the same time.

Mum B: But we have already implemented all these water saving measures. We believe that we can do more besides these.

Water Save Dave: That's a good attitude. Let me share more tips with you. You can easily save 20% of water by installing a flow controller on your water taps and showerheads.

Boy: You can also control the water used for toilet flushing by switching to a dual flushing cistern. This type of cistern allows you to choose between a normal flush and a reduced flush. Still, it is important to avoid flushing unnecessarily, such as disposing trash into the cistern and flushing it away.

Girl: In addition, you can use household appliances such as showerheads, water taps and washing machines with high water efficiency, which can help you save more water, so always remember to check the Water Efficiency Label when buying plumbing fixtures and water-consuming devices.

Dad B: What's a Water Efficiency Label?

Super:  
Water Efficiency Label  
Voluntary Scheme

Water Save Dave: The Voluntary Water Efficiency Labelling Scheme introduced by the

Water Supplies Department is a water conservation initiative of the Hong Kong Government. Products participating in this scheme are required to incorporate a Water Efficiency Label that informs consumers of the level of water consumption and water efficiency of the product, in order to help them to make a better water-saving choice.

Dad B: So how should we read the label?

Water Save Dave: There is a water consumption rate of the product on the label which is verified by testing, with droplets indicating its Water Efficiency Grade. Products are categorized into 4 grades which are shown in different colors. The fewer the droplets, the more water efficient the product is.

Mum B: Does that mean if there are 4 droplets on the label, then the product is the least water efficient and performs the worst in terms of water saving... and if there's just 1 droplet on the label, then the product is the most water efficient, and saves the most water?

Water Save Dave: Bingo. The grade 1 label with green color means the product is the most water-saving. That's why we need to check the Water Efficiency Label before buying a water-consuming product next time!

Dad B & Mum B: We got it!

Super: saving water

Water Save Dave: After learning different water saving measures, remember to put our theory into practice. If everyone pledges to play a role in water saving to relieve the water crisis, our living environment will be better in the future. Great, that's all for today. Water-saving Taskforce, retreat!

Dad B & Mum B: Bye, Water-saving Taskforce!

Water Save Dave & Boy & Girl: Bye bye!