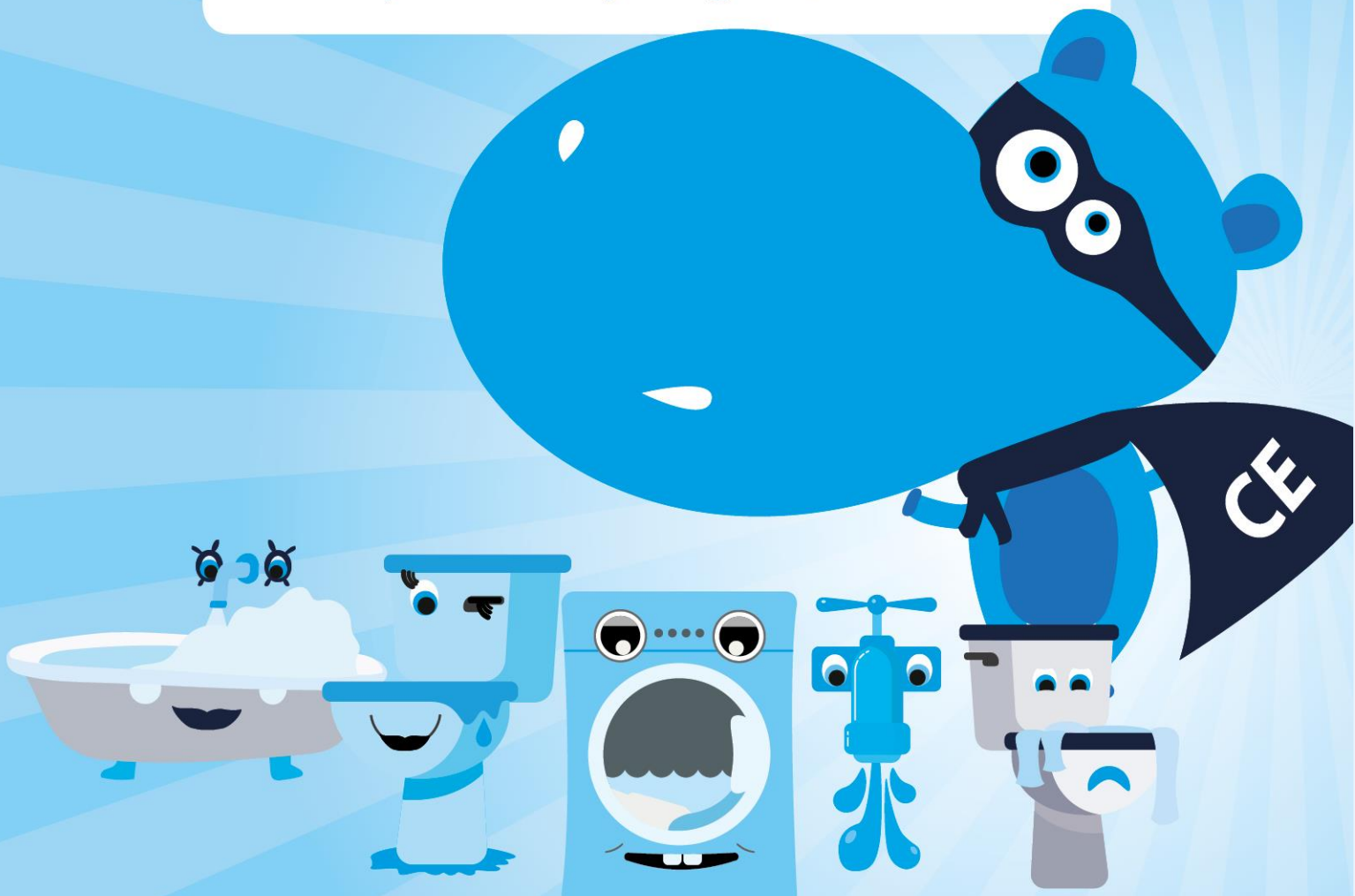


CAPTAIN EFFICIENT

v the water wasters

Activity book: Key Stage 1 (Years 1 & 2)



Introduction

In this book, you will find a number of different activities that use English, Art and Maths. The activities all follow on from each other and include different things to do to keep it fun!

There are examples and a checklist for each activity so you can make sure you've included everything in your work. This will also mean that your teachers can see what you've been working on and how it fits in with your school work.

You won't need to print out the book; you can use one of your school books or a notebook to do the work in. All you need is your imagination! Don't forget you can send us photos of your work but ask an adult's permission first.

Have fun!



Captain Efficient's arrival

At South Staffs Water HQ, they were getting worried about people wasting water.

'What we really need', said Mr Willicott, 'is a superhero.'

Suddenly, there was a whizz, bang, pop and a flash of shimmering blue light. Standing there like a proud peacock was a blue hippopotamus, his superhero cape fluttering behind him like a butterfly.

'I'm Captain Efficient', cheered the hippopotamus in a loud, booming voice. 'I spend all my time fighting water wasting crime. I'm just the one you need, my message they must heed.'

Mr Willicott jumped up and down in delight and clapped.

'Can you find me some Water Warriors Captain Efficient?' he asked, 'then we can spread the water saving message far and wide.'

Captain Efficient agreed that he would make this his mission, for saving water is very important. As quick as a flash, he disappeared with another whizz, bang, pop and a flash of shimmering light.



Word watch

What does 'efficient' mean?

Sometimes your teachers/people at home might tell you to use your time, 'efficiently'. This means that they want you to use your time well, so that none gets wasted. Captain Efficient teaches people to use water well, so that it doesn't get wasted.



Task

Read the short story of Captain Efficient's arrival out loud, use your phonics to help you, and blend sounds to help you read any words you are unsure of. If you're not sure what some of the words mean, ask an adult to help you. Try adding in some expression as you read, or if it helps, act out the story.

Then complete this activity:

1. What colour is Captain Efficient?
2. (Fill in the missing words) Captain Efficient appeared with a whizz, _____, _____ and a flash of shimmering _____ light.
3. What type of voice does Captain Efficient speak in?
4. What did Mr Willicott ask Captain Efficient to find for him?

Checklist

I have:	Learnt new words and found out what they mean	
	Read out loud and used my phonics to help me read words and blend the sounds of new words	
	Read words ending in s, ing, ed, er	
	Used role play to help me understand the story	
	Written sentences and left the right amount of space between words	
	Used capital letters, full stops and commas in my writing	



Where do we get our water from?

At South Staffs, we get our water from three places; a big, man-made lake (Blithfield Reservoir), the river (River Severn) and water held underground in the soil, or in rock (groundwater). The water is then pumped to our treatment works, where it's cleaned, before being pumped to a large indoor building (service reservoir) to be stored and then pumped out to your homes.

But how does the water get to the river and reservoir in the first place?

A big part of the earth is covered in water, which keeps going round in one cycle; the water cycle, meaning that we drink the same water as dinosaurs! Yes really!



Read the story of 'Little Drop' below to help you understand the water cycle.

Little drop

Little drop of water swimming in the sea,
Little drop of water, as happy as can be.

Little drop of water waves his friends goodbye,
As he rises to the sun shining in the sky.

Little drop of water floating through the air,
Little drop of water hasn't got a care.

Little drop of water gets swept up in a cloud,
Joining all his friends there, it gets very loud!


The cloud starts to shudder and rain begins to fall,
Out comes little drop, friends and all.

Little drops bouncing into lakes and streams,
Playing with his friends, little drop beams.


Finally the drops find their way back to the sea,
Swimming around together, as happy as can be.




Word watch

 **Evaporation** – when the sun heats the water from the sea and it moves up to the sky as **water vapour**. This is shown through this part of the story,

‘Little drop of water waves his friends goodbye,
As he rises to the sun shining in the sky.’

 **Condensation** – when the water vapour gathers together to form a cloud. This is shown through this part of the story,

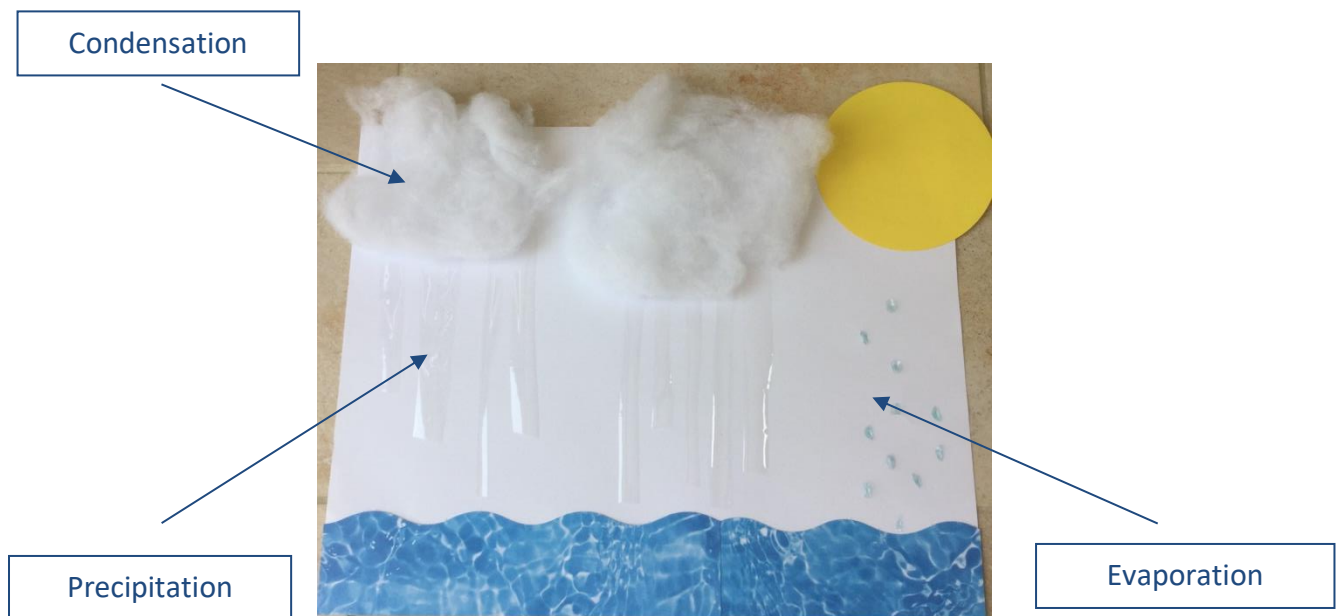
‘Little drop of water gets swept up in a cloud,
Joining all his friends there, it gets very loud!’

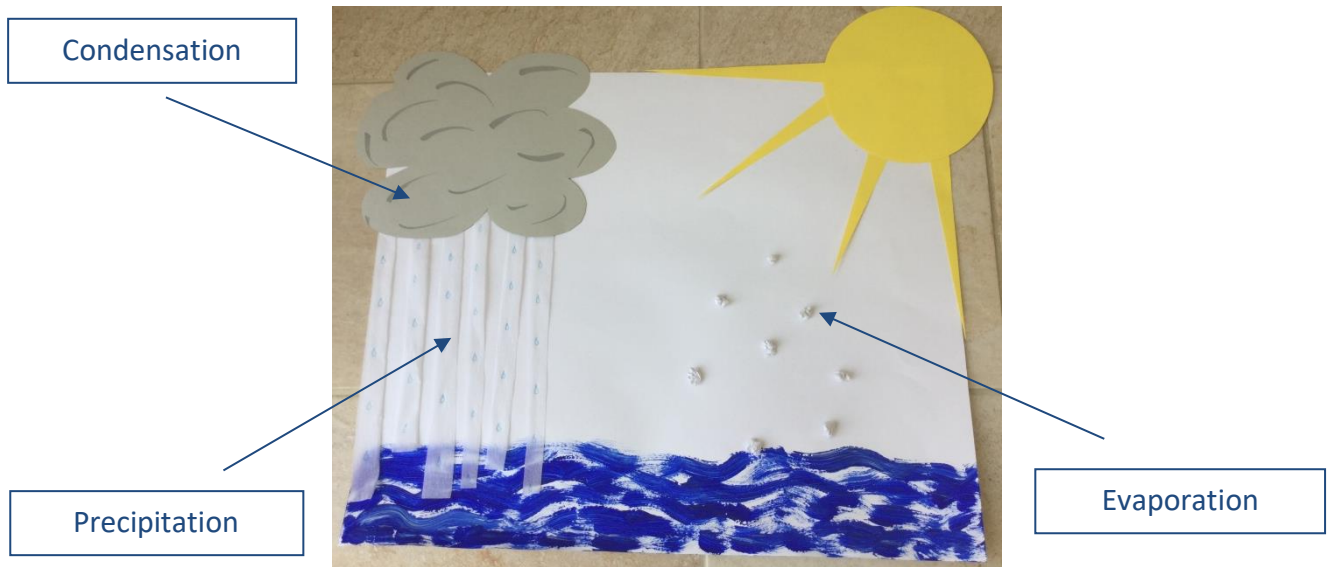
 **Precipitation** – when the clouds get full, rain falls to the ground. This is shown through this part of the story,

‘The cloud starts to shudder and rain begins to fall,
Out comes little drop, friends and all.’

Task

Now see if you can draw out the water cycle and label the different stages, or you could try making a water cycle collage, complete with sun, clouds and rain!
(See the examples below)





Checklist






I have:	Used my phonics to help me read words and blend the sounds of new words	
	Learnt new words and found out what they mean	
	Used the story of 'Little drop' to help me draw/make my own water cycle and label it	



Water use

Take a few minutes to write a list of all the different things we use water for, maybe ask people at home to help you.

Here are a few things to get you started, how many more can you think of?

-  Washing your hands
-  Flushing the toilet
-  Cleaning your teeth
-  Washing machine
-  Watering plants

As you can see, we use water for lots of different things, so it's important to make sure we don't waste any, so there's plenty for us all to use in the future.

You can read about some of the different ways water gets wasted below. Captain Efficient's mission is to stop water wasting for good!

Leaky toilets – waste water as they lose little dribbles of water that can't be seen. This not only wastes water but also money for people who have a water meter.

Our 'Leaky Loo' strips help to detect a leaking toilet by fading or ripping, indicating that the toilet needs fixing.



Half-full appliances – unless washing machines or dishwashers have an Eco setting, they use just as much water when they're only half full as they would for a full load, so the extra water is going to waste.

Captain Efficient says, "Save water by filling your dishwasher and washing machine before you put them on."



Running taps – waste water by being left turned on. It's important that we remember to turn our taps off when we're cleaning our teeth instead of leaving it running.

We know it's really important at the moment to wash your hands, but you can still save water by turning the tap off whilst you lather the soap on your hands. Or, you could put the plug in the sink and use that water to wash your hands instead of leaving the tap running.

Runaway Ronnie



Flushing rubbish down the toilet – Flushing things like wipes, cotton wool and tissues down the toilet not only wastes water but can also block the pipes and cause problems at the sewage treatment works, as they don't break down properly. It's important to remember that the only thing that should go down the toilet are what we use it for and toilet paper, everything else needs to go in the bin.



Dirty Girtie

Full baths – we're not saying don't have a bath, it's important to keep clean, but don't fill your bath all the way to the top. By having it a few centimetres shorter you're saving water by only using the amount you need.

Another way to save water and keep clean is by having a four-minute shower. You can use a shower timer or find a song you like that's four minutes long and put it on while you're in the shower and when it's finished you know it's time to get out!



Bath-full Bella

You can order your **FREE** water efficiency devices at:

www.savewatersavemoney.co.uk

Be sure to ask an adult for permission.



Task

Use the information above to help you complete these sentences:

1. Leaky toilets waste water as they lose little dribbles of water that can't be seen.
True or false?
2. Leaky loo strips help to detect a leaky toilet.
True or false?
3. You can save water by filling your dishwasher and washing machine before you put them on.
True or false?
4. You can leave the tap running whilst you clean your teeth, it won't waste any water.
True or false?
5. To save water whilst washing your hands, you can put the plug in the sink and use that water to wash your hands in.
True or false?
6. Flushing wipes, cotton wool and tissues down the toilet doesn't waste water and won't block the pipes.
True or false?
7. You can save water by not filling your bath all the way to the top.
True or false?
8. You can also save water and keep clean by having a four-minute shower.
True or false?

Now for a challenge! Try and think of one thing you can do to use less water. This could be turning the tap off when you clean your teeth or not flushing tissues down the toilet. Small actions can make a **BIG** difference, if we all try to do it!

Checklist

I have:	Written a list of all the different things we use water for.	
	Read about how water gets wasted and what we can do to save water.	
	Used the facts about water saving and wasting to complete the sentences with missing words	
	Thought about what I can do to try and save water	







Water Warriors

Mr Willicott asked Captain Efficient to find him some Water Warriors to help spread the water saving message. Your mission, should you choose to accept it, is to create your own Water Warrior. Be as creative as you want, there are many different ways to create your character; pencil, paint, play dough, recycling, so many possibilities!

You may need an adult to help you and don't forget you can share your creations with us via social media, just remember to ask permission first.

Task

To create your own Water Warrior, you'll need to think about:

-  Are they going to be a person, an animal or an object?
-  What are they going to be called?
-  Do they have a superpower?
-  How do they get people to save water?

Once you have created your Water Warrior, write a few short sentences about them. For example, 'This is Captain Efficient, he is a blue hippopotamus. He tells people how to save water by turning taps off when they clean their teeth.'

Now you've learnt about how to save water and you have your very own Water Warrior, it's time to teach other people how to save water.



Task

Make a poster to teach people how to save water, you can use one of the messages below to help you or write your own. You could even include your Water Warrior on the poster.

Save water by turning off the tap when you clean your teeth

Check your toilet for leaks with a Leaky Loo strip

Don't be a Half-full Harry, fill up your dishwasher

Don't flush rubbish down your toilet

Save water with a four-minute shower

Save water with the Water Warriors

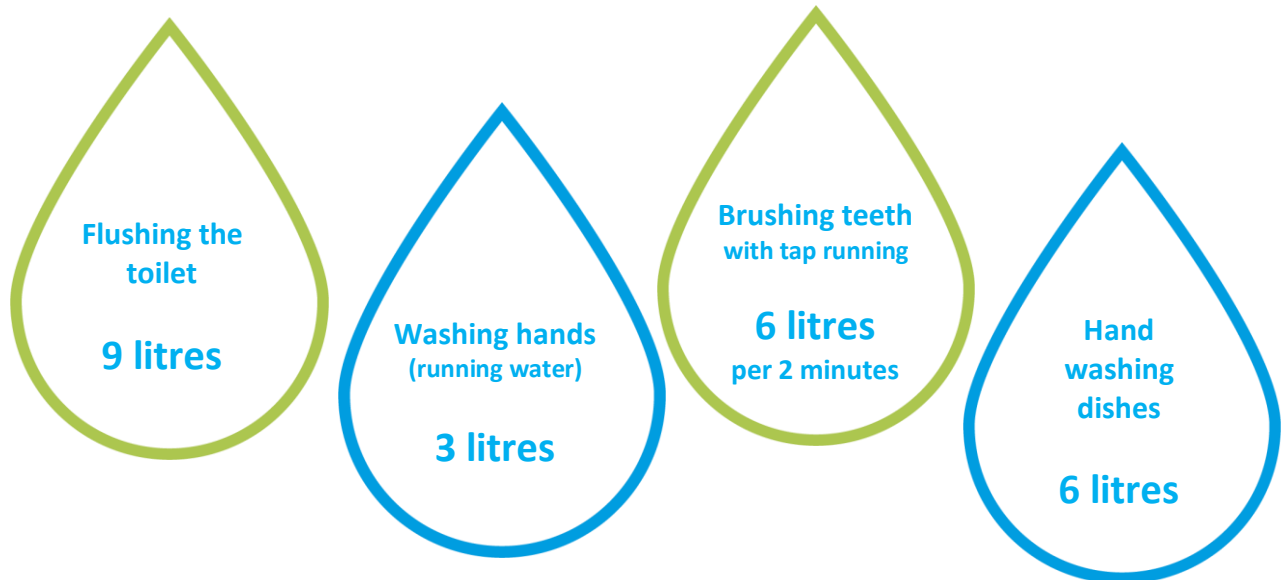
Checklist

I have:	Used what I have learnt about saving water to make a poster to teach other people about water saving.	
	Included a water saving message on my poster	
	Included a picture of my Water Warrior	



Water Maths

Now we're going to use what you've learnt about saving water to do some sums.



1. Find out many litres of water flushing the toilet and washing your hands uses by doing this sum: $9 + 3 =$
2. Find out many litres of water are used by hand washing dishes twice a day by doing this sum: $6 + 6 =$
3. Find out how many litres of water are used cleaning your teeth twice a day with the tap running by doing this sum: $12 \times 2 =$
4. Find out how many litres of water are used by flushing the toilet twice by doing this sum: $9 \times 2 =$

Checklist

I have:	Added one and two-digit numbers	
	Practiced using number bonds	
	Practiced my times tables	



Re-cap

To re-cap what you've learnt in this book, try answering the questions below:

1. Captain Efficient arrives with a _____, _____, _____.
2. What does 'efficient' mean?
3. Water keeps going round in one cycle, meaning we drink the same water as dinosaurs.
True or false?
4. When the sun heats the water from the sea it is called _____.
5. The second part of the water cycle, when the drops of water make a cloud is called _____.
6. When the clouds get full _____ falls to the ground. This is called _____.
7. List five things we use water for.
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 -
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8. Why do leaking toilets waste water?
9. Why shouldn't you flush rubbish down the toilet?
10. How many minutes should you spend in the shower?



11. List three ways water can be saved.

-
-
-

12. How many litres of water does flushing the toilet use?

13. What can you do at home to try and save water?

14. Tell five other people all about how to save water. These could be other people at home or friends and family you catch up with.

Remember to take photos of your work to show your teachers what you've been working on. There are lots more water-themed activities to do on our website:
<http://www.south-staffs-water.co.uk/community/education>

