

WATER HERO

EARLY LEARNING EDUCATION PACK



Brought to you by:



ACKNOWLEDGEMENT OF COUNTRY

Practicing a daily Acknowledgement of Country encourages children to embrace diversity, and demonstrates recognition and respect to the Traditional Owners of the land.

There are many ways to Acknowledge Country. The following is an early years version that helps young minds connect body to land, and highlights the significant value Aboriginal people place on connecting to, and caring for, the environment.

“We would like to acknowledge the Aboriginal and Torres Strait Islander Peoples, the Traditional Custodians of lands, waterways and skies across Australia. We thank you for sharing and caring for the land we learn and play on. We pay our respects to Elders, and we share our friendship and kindness. Together we touch the ground of the land.

(TOUCH GROUND)

We reach for the sky that covers the land, and provides us with rain.

(RAISE HANDS)

And we touch our hearts to care for the land and waterways.”

(TOUCH CHEST OVER HEART)

Acknowledgment:
ABC Playschool – Acknowledgment of Country 2019
Kids Listen program 2018



EDUCATION PROGRAM OVERVIEW

Barwon Water's education program was established in the early 1980s, and strives to provide engaging and relevant water education to all students in our service region. The program connects with students at all levels of education, building a solid foundation of water literacy amongst our next generation of community members and leaders. Designed to link in with the Victorian Curriculum and delivered via a combination of teacher resources, incursion and excursions, our education program is part of our commitment to building a resilient and secure water future.

WATER HERO PROGRAM

The Water Hero program provides early years educators with a structured course that empowers, engages and focuses young minds on key water-related themes.

The dedicated topics (missions) incorporate educator-lead activities, structured play and independent extension tasks, so children can learn fundamental water concepts, and are supported in transferring this knowledge to others (fellow students, family and friends).

The intention of the Water Hero program is for educators to work through each mission for a minimum of four sessions (one mission per session). However, we encourage early learning centres to continue the program over a longer period of time, with a new child selected as the daily 'Water Hero'.

Educators are free to photocopy and distribute individual activities within the classroom, and for students to take home. Broader use of activities and images must be approved by Barwon Water in advance.

CURRICULUM LINKS

Our early learning program supports the Victorian Early Years Learning and Development Framework (VEYLDF), by empowering our youngest community members to take responsibility for their actions, and encouraging conversation and peer support in driving positive behaviour change around health and efficient water use.

Our Water Hero program covers various aspects of all five Learning and Development Outcomes within the VEYLDF:

- Identity – children have a strong sense of identity
- Community – children are connected with and contribute to their world
- Wellbeing – children have a strong sense of wellbeing
- Learning – children are confident and involved learners
- Communication – children are effective communicators.

TUNE IN ACTIVITIES

The following activities are suggested as a means of turning children's minds to the broader topic of water, and its value and importance in our lives, as well as the environment and planet as a whole.

These activities can be used as a lead in to each Mission.

THINK QUICK:

Throw a ball or bean bag around the group and say a water-related word when you catch it, e.g. drinking, shower, rivers, rain, wet, puddles, clouds etc.

CHARADES:

Children sit together on the floor. One child stands in front and acts out a water-related activity and the group guesses what they are doing, e.g. watering the garden, having a shower, washing hands, brushing teeth etc.

WATER HERO SONGS:

Let's be Superheroes - Bounce patrol
(Youtube link - <https://youtu.be/Py4fhsx3Ct4>)

Let's go Heroes - KidSpring Children's Ministry
(Youtube link - https://youtu.be/K_iert5hSKY)



Meet

DRIP & DROP

This is Drop.

Drop knows how important water is, and why we should always do our best not to waste it. Drop has to keep an eye on Drip, and reminds Drip not to waste water.

This is Drip.

Drip forgets to turn taps off, likes having long showers, and never pays attention to which button he presses when he flushes the toilet. Drip uses much more water than Drop every day.



MISSION ONE

WATER HEROES

OVERVIEW

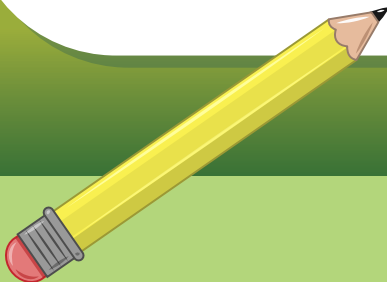
This mission sets the purpose for the program by encouraging conversation around the value of water and the need to use it efficiently. The children take the Water Hero pledge, promising to drink water every day, do the right thing with water (not waste it), and encourage others (family and friends) to do the same.

Each day/session a new student is selected as the Water Hero. They wear the cape and badge for the day and try their best to ensure everyone else is doing the right thing, for example, drinking enough water throughout the day, turning taps off, pouring excess water onto plants, etc.

WHY BE A WATER HERO?

Educators can use the following prompts to commence the water conversation.

- How do we use water at kinder and home?
 - Why is water good for our body?
 - What else on Earth needs water?



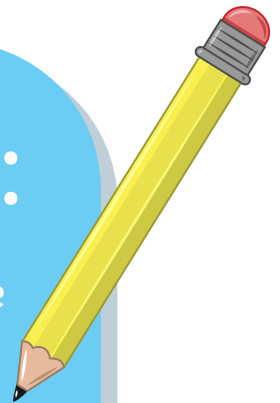
Water is vital to all life on Earth. It is in every living cell, in everything we eat and drink, and makes up more than 60% of our bodies. It is the best 'everyday' drink for our body, and helps our muscles work, our brain concentrate and our blood flow.

Water is also important for a healthy environment. Plants and animals rely on water to survive, just as humans do, but with less rainfall and a growing human population, there is less and less water left over for the environment. It is a Water Hero's responsibility to ensure water is recognised and valued as the vital, life giving, resource it is.

Educators should select a child to be the Water Hero for that day, present them with the cape and badge, and explain their role as the Water Hero.

A WATER HERO:

- Knows how important water is, and where our water comes from.
- Drinks enough water for a healthy body, every day!
- Uses water carefully and with purpose.
- Doesn't waste water by having long showers or by leaving the tap dripping.
- Looks after plants and animals by making sure they have enough water.
- Reminds others to do all these things as well!



GROUP ACTIVITY

TAKE THE WATER HERO OATH

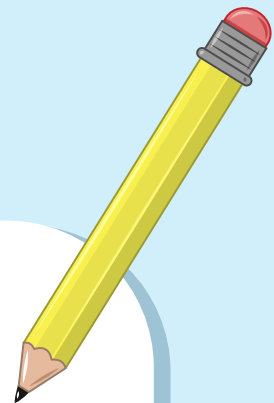
Are you ready to learn why water is so important? Can you drink mostly water every day? Will you make sure you turn the tap off every time you use it? Do you think it is important for plants and animals to have water too? And will you share your new water knowledge with your friends and families?

Then you are ready to be a Water Hero!

Place your hand on your heart and repeat after me...

(PLACE HAND OVER HEART)

"I promise to look after our water.
To drink lots, and waste none.
I promise to help others remember
why water is so important, and will
try my hardest to be a great Water Hero."



WATER HERO



PLEDGE AND OATH

I promise to look after our water.
To drink lots, and waste none. I promise to help others remember why
water is so important, and will try my hardest to
be a great Water Hero.

"I promise to ,to help save water."



WATER HERO

SUPER SIZED COLOUR IN PAGE



NAME.....

MISSION TWO

WATER FOR EVER

OVERVIEW

This mission looks at the various ways we use water at kinder and home, and the need to be mindful when using water so it is used carefully and not wasted. The aim is to make children aware of the simple things they can do to not waste water.

Educators are encouraged to use Drip as an example of what not to do and Drop as a positive example.

HOW CAN A HERO SAVE WATER?

Our drinking water comes from rain. When it rains we collect water in our dams. This water is then cleaned and sent to our homes and kinders through underground pipes.

We all use water in many ways. Sometimes we use a lot of water; like when we have a shower or a bath, and other times we only use a little; like when we brush our teeth or have a drink.

“Can you list all the ways that you used water today?”



If it doesn't rain, we are not collecting water. But we still use a lot of water every day. If we are not careful when using water, it can be easy to waste it. And if we waste all our water we might not have enough. This is why it is important that we all try our best not to waste water.

WHAT CAN A WATER HERO DO TO SAVE WATER?

- Remember to turn taps off after we wash our hands, and while we brush our teeth.
- Use the half flush button when at the toilet.
- Have a short (4min) shower, or half fill the bath.
- Tell an adult if you notice a leak.

Can you name any other ways to save water?



GROUP ACTIVITY

CUT OUT THE WATER DROPS

Following the group discussion, children can cut out the memory drops below and place around the kinder, or take them home to remind them and others how to save water.

Place near
taps



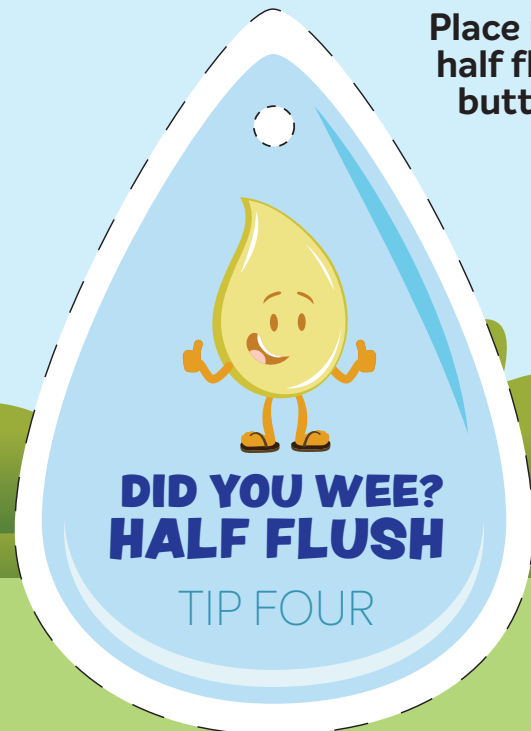
Place near
showers



Place near
full flush
button



Place near
half flush
button



SPOT THE DIFFERENCE



ANSWERS:

Drip has one eye closed. There is less water on the floor. The shower head is water saving.
There is more time on the clock. There are less water drops.

MISSION THREE

WATER FOR HEALTH

OVERVIEW

This mission looks at health and hydration, and the many reasons water is important for a healthy body and mind. We also compare water to other common drinks that young children consume, and remind children that water is the best 'everyday' drink.

Educators are encouraged to lead by example and demonstrate a healthy water habit by drinking water throughout the day in front of the children.

CHOOSE WATER EVERY DAY

Our body is over 60% water. There is water in every single cell in our body, including our blood, brain, muscles and skin. Drinking small amounts of water throughout the day is the best way to make sure we stay hydrated, and look and feel our best.

Water helps us to;

- Keep our teeth clean
- Concentrate
- Exercise
- Digest our food
- Fight against disease
- Remove bodily toxins
- Look and feel healthy.



WHAT IS DEHYDRATION?

Our body is losing water all the time. When we sweat, go to the toilet and digest our food...we even lose water every time we breathe.

Dehydration is when our body loses more water than we replace by drinking. On hot days this can happen very quickly. By the time you feel thirsty your body is already dehydrated!

DEHYDRATION SIGNS:

- Thirsty
- Headache
- Can't concentrate
- Feeling hot
- Tired
- Pale skin
- Feeling sick/ vomiting.



'I feel tired and can't concentrate.'



'Keep your water bottle full!'

HOW MUCH WATER SHOULD I DRINK?

Young children should drink between 4–6 glasses (1 – 1.5 litres) of water per day, dependent on their level of activity. But remember, you can't drink too much water, so more is better than not enough!

HOW MUCH SUGAR IS IN THAT DRINK?

Water is the best 'everyday' drink for our bodies. Other drinks, like fruit juice, flavoured milk and soft drinks are 'sometimes' drinks. These drinks are nice to have at parties or special occasions, but should not replace drinking water.

Let's look at how much sugar is in some common 'sometimes' drinks. Educators can use real sugar, a spoon and a see through cup to show just how much sugar is in each drink. Children can count out each spoonful of sugar.

The World Health Organisation recommends adults have less than 25 grams, or six teaspoons, of added sugar a day (there is about four grams of sugar in one teaspoon). Children should have even less. A four-year-old should have less than three teaspoons of sugar a day, while under the age of two, kids should have no added sugar.



Ask the children:

“Would you ever eat this much sugar in one go?”
(Expected answer “No!”)

“Well each time you drink a cup of this drink,
you are putting this much sugar in your body.”

GROUP ACTIVITY

HOW MUCH SUGAR: Ask the children to guess how much sugar is in each drink. Count out the spoonfuls as you go.

Drinks	Amount of sugar (gms)	Amount of sugar (teaspoons)	Amount of daily sugar needs* %
Fruit box (250ml)	28 grams	7 spoons	31 %
Soft drinks (250ml)	26.7 grams	6.5 spoons	30 %
Flavoured milk (250ml)	24.2 grams	6 spoons	26.7 %
Sports drink (250ml)	15 grams	3.8 spoons	16.7 %
Water (250ml)	0 grams	0 spoons	0 %

*based on adult diet

How many spoons?

TOTAL

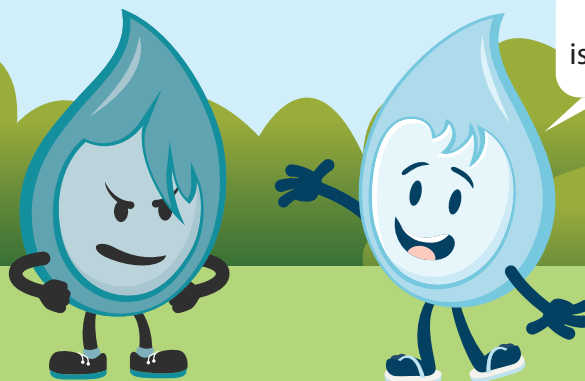
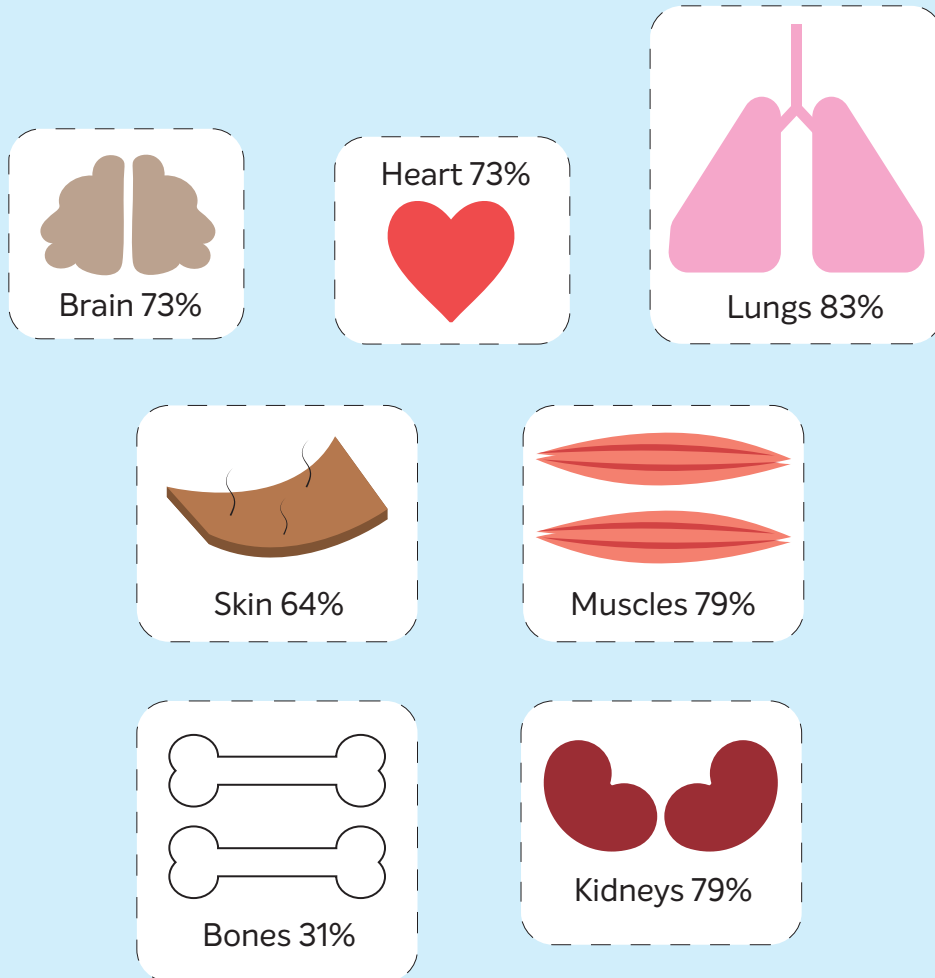
Why is added sugar bad for our body? Excess added sugar in our diet is bad for our bodies in many ways, and can contribute to the following conditions:

- Lower concentration
- Stomach-aches
- Long term illness like diabetes
- Excess weight gain
- Tooth decay
- Weaker immunity
- Hyperactivity.

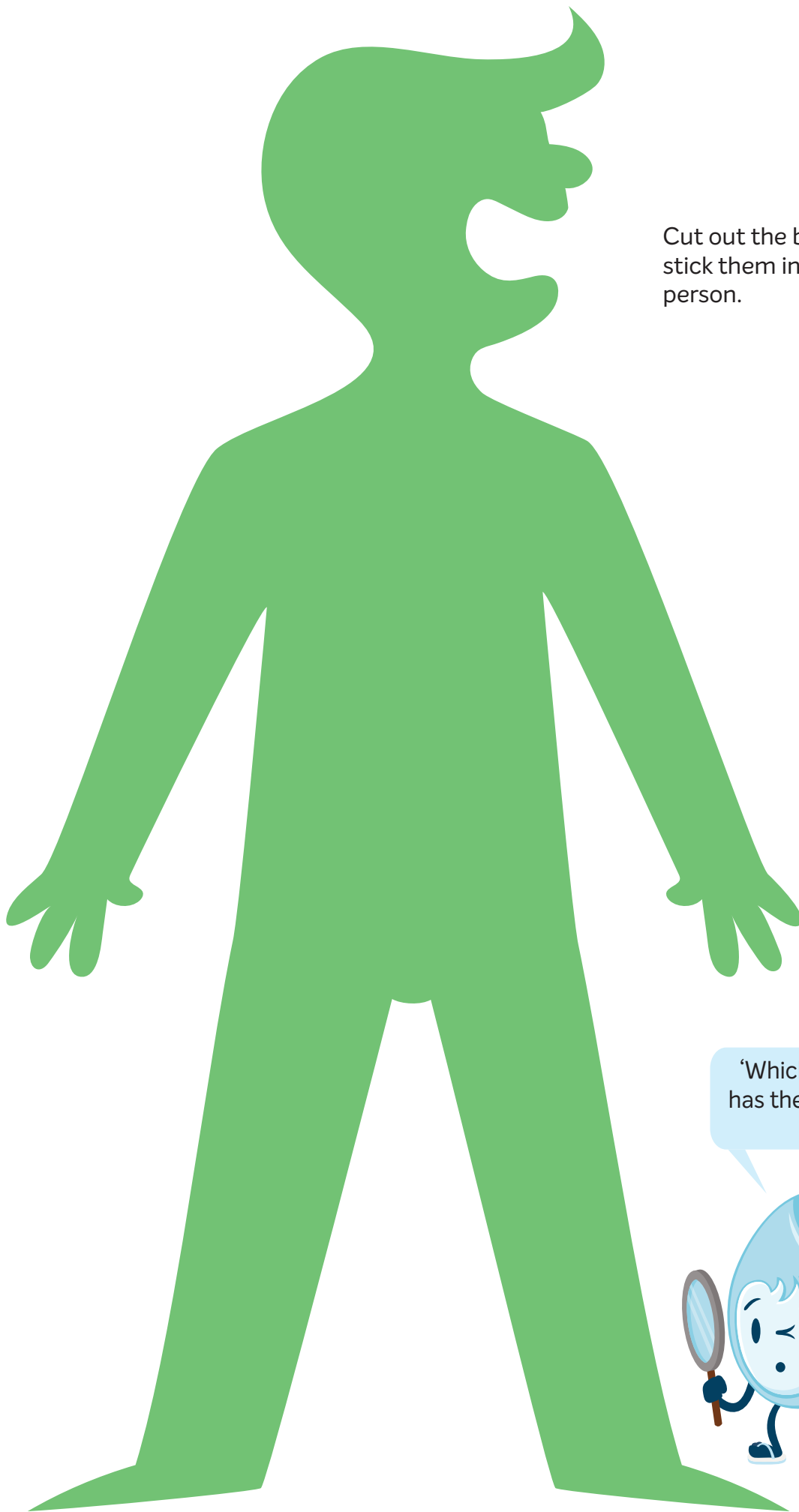


WATER IN THE HUMAN BODY

There is water in every cell in our body. Without enough water our body could not do the things we need it to do.



'The human body is more than 60% water!'



Cut out the body parts and stick them in place on the person.



'Which body part has the most water in it?'

MISSION FOUR

WATER FOR THE ENVIRONMENT

OVERVIEW

In this mission we learn about the water cycle, and where our water comes from. We also consider the important role water plays in helping to maintain a healthy environment.

Water is essential for all life, and fortunately for us, more than three quarters of the Earth's surface is covered by it. This is mostly due to the fact that Earth is exactly the right distance from the sun. Any further away and the oceans, rivers and lakes would freeze over, making the water inaccessible. Any closer and the water would evaporate away, leaving behind a very dry and desolate land mass.

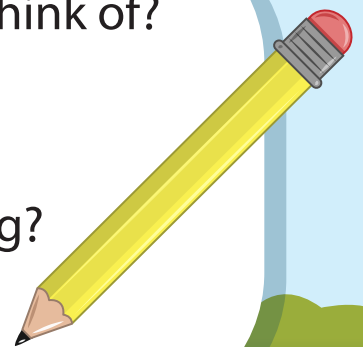
But water comes in many forms, not all of them suitable for drinking.

- What different forms of water can you think of?

(Hint: Think of frozen water, water in the ocean and underground water.)

- Can we use all of them for drinking?

(Hint: What do they taste like? Are they easy to get to or to clean?)



In fact, most (97%) of the water on Earth is salt water found in our oceans and seas. Salt water is not healthy for us, and so we can not drink this water.

The remaining water (3%) is fresh water, however most of this water is frozen solid as icebergs and glaciers, which is not useful as drinking water, or underground, which is hard to get to and hard to clean. This leaves a tiny amount (less than 1%) of the total water on Earth as accessible, above-ground fresh water, flowing along rivers and in lakes. It is only this small amount of water that is suitable for drinking, and that we must share with all the animals and plants on earth.

How can we help share our water with the environment? Water can become dirty (polluted) if we are not careful when we are near it. Dirty water can look and smell really bad, and if the water becomes too dirty, it is hard for animals to live in it too, or use for their drinking water. Water that is badly polluted can be very unsafe for people and pets to swim in or even touch!

- Have you ever seen dirty or polluted water?

How did that make you feel?

- What can we do to help keep rivers and lakes clean?

(Hint: What should we do with our rubbish?)



Keeping our parks, rivers and lakes rubbish free is the easiest and best way we can help protect our environment, and provide a healthy home for the plants and animals we share it with.



CLASS ACTIVITY

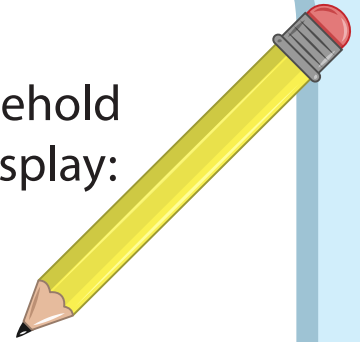
WATER CYCLE IN A BAG

The water cycle does an amazing job of turning the salt water in the ocean to fresh water (rain). It is hard to see the water cycle at work in real life, however one way we can see it working is by making our own water cycle in a bag.

WHAT YOU'LL NEED:

You need just a few common household items to create your water cycle display:

- Plastic zip lock-style bag
- Permanent marker(s)
 - Water
 - Blue food colouring
 - Clear tape



INSTRUCTIONS:

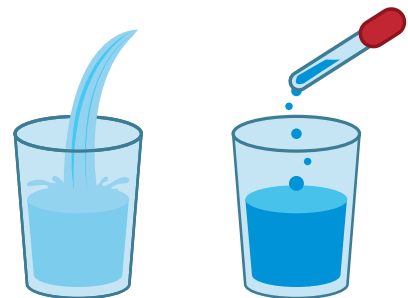
STEP 01:

Before you do anything else, decorate your bag! Use your permanent marker (washable markers will wash right off) to draw a sky in the upper half of your plastic bag. Include clouds and the sun, as they are important elements to the water cycle.



STEP 02:

Fill a cup with regular tap water. Then add a couple of drops of blue food colouring to it to make it stand out. Swirl the cup of water a few times to mix the colouring until it's a nice, solid blue.



Now, carefully pour the water into the plastic bag and zip it closed. Make sure it's nice and tight! You don't want any water to be able to escape.



STEP 03:

Once your water has been added to the bag and it's sealed up, it's time to hang it up on a window! Pick a window that gets a lot of sunshine for best results. Cut two long pieces of tape and stick them to the corners of your bag. Then, press the tape tightly to the window - you don't want your bag to fall down!



STEP 04:

Wait a couple of hours and check on your experiment. You should see a change in your bag between two hours and one day (depending on the amount of sun and the time of day you started).



Eventually, you will begin to see droplets of water sticking to the side of the bag. Some of these will be up high (in the clouds) while other droplets will be on their way back down (like rain).

- What has changed in the bag?
- What do you notice?
- Why is this happening?



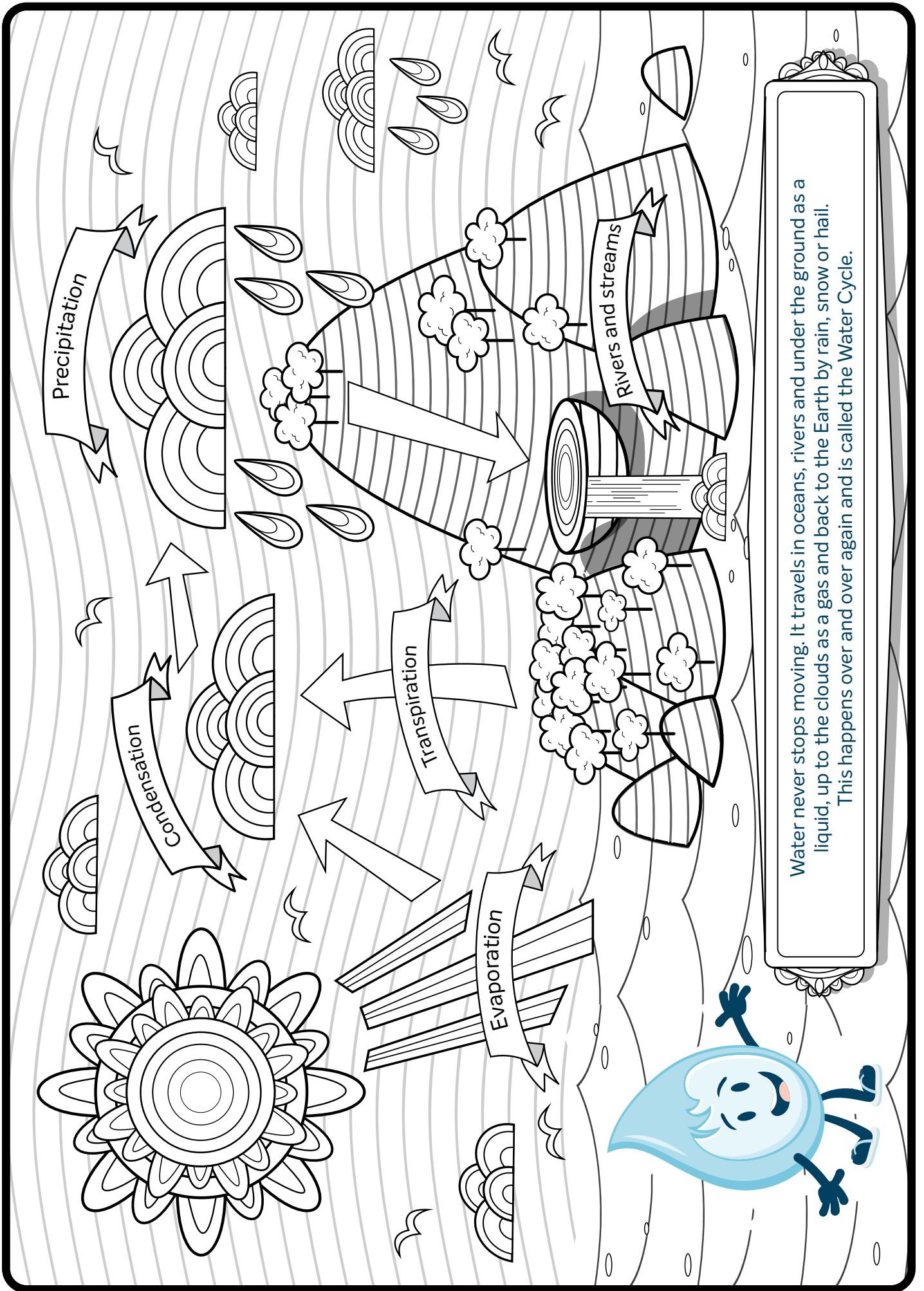
It's because the water in the bag is being heated up against the sunny window. That water turns into a gas through the process called evaporation. In nature, evaporated water vapour goes into the atmosphere, but in our bag, it has nowhere to go, so it ends up sticking to the sides of the bag, turning back into a liquid as condensation. That condensed water then slides back into the pool of water below as "rain".

Keep checking back on your experiment a few times a day, or anytime it's sunny to see the water cycle progress!

- What other examples of the water cycle can you think of?

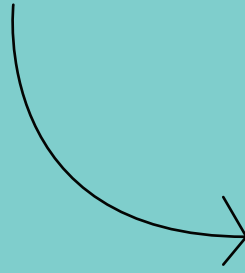
(Hint: Bathroom mirror after a hot shower, car windscreen on a cold morning, steam coming out of the kettle etc.)





Water never stops moving. It travels in oceans, rivers and under the ground as a liquid, up to the clouds as a gas and back to the Earth by rain, snow or hail. This happens over and over again and is called the Water Cycle.

CUT OUT
A WATER HERO
BOOKMARK!



ARE YOU A WATER HERO?

Are you ready to learn about why water is so important? Can you drink mostly water every day? Will you make sure you turn the tap off every time you use it? Do you think it is important for plants and animals to have water too? And will you share your new water knowledge with your friends and family?

Then you are ready to be a Water Hero!



Connect with us for further information

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WATER HERO

