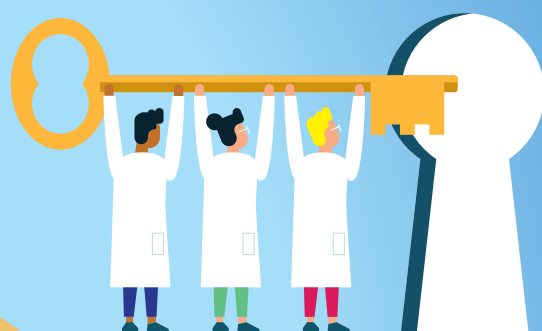


Climate emergency escape room



YOUR MISSION

We need your help. Climate change has greatly impacted the watercycle across the globe, including here in Northern Ireland, causing more extreme climate events like floods and droughts and has put pressure on water supplies to our homes. As a top hydrologist (water scientist) attending the COP26 climate emergency meeting in Glasgow, Scotland you need to use your knowledge of the watercycle to solve the challenges to unlock the codes to help save the watercycle from the brink of disaster!

You have 30 minutes to complete your mission.

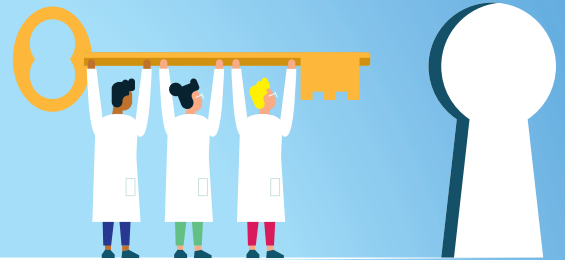
Complete each challenge to reveal the codes to move onto the next challenge. You must have the correct code to unlock the next challenge. Complete all 5 challenges to reveal the secret message.

Once you have discovered the secret message email **education@niwater.com** to receive your water saving goodies

Good luck!



Climate emergency escape room



TEACHERS INSTRUCTIONS

- 1 Split the class into teams to undertake the mission
- 2 Read the mission out loud to the class and hand out the first challenge- set a 30 minute timer when ready to start
- 3 As each team completes the first challenge they come to check the code is correct before receiving the next challenge
- 4 Repeat step 3 until all 4 challenges and codes have been completed correctly and the secret message is revealed
- 5 Email education@niwater.com with the secret message to find out if the class have successfully completed the mission and to receive your special prize!

Correct codes

LOCK#1 code

f	g	m	w	c	e	t	c	o	s
1	2	3	4	5	6	7	8	9	10

LOCK#2 code

s	o	e	c	p	r	w	h	w	r
1	2	3	4	5	6	7	8	9	10

LOCK#3 code

G	E	A	C	F	B	D
1	2	3	4	5	6	7

LOCK#4 code

T	F	F	T	T	T	F	F	T	T
1	2	3	4	5	6	7	8	9	10



CHALLENGE 1

Directions

Fill in the blanks using the word bank below.
Take the **first letter** for each word in order within the passage to construct the clue to open LOCK #1 and move onto the next challenge.



OUR CHANGING CLIMATE

Over the past 150 years the burning of large amounts of ¹ _____ fuels such as oil, coal and gas has released huge amounts of harmful gases we call greenhouse gases into the earth's atmosphere. This has created a ² _____ effect as the gasses create an invisible blanket around the earth, trapping more heat from the sun and warming the earth. This causes climate change as global temperatures rise and heat up our planet.

As temperatures increase, sea ice is also ³ _____ causing sea levels to rise creating problems for both people and wildlife.

Climate change is affecting every country, even Northern Ireland, making our weather more extreme and unpredictable. As a result of climate change some areas will get ⁴ _____ with more rain, floods and storms and some areas will get drier with less rain and drought.

Across the world ⁵ _____ change and global warming has been impacting our water and watercycle and is also affecting how people get clean drinking water to their homes.

Northern Ireland Water is the biggest ⁶ _____ user in Northern Ireland. It takes lots of energy and electricity to clean our drinking water and bring it safely to our homes. NI Water are working hard to reduce the amount of harmful gasses it releases into the atmosphere by building more renewable energy sites such as wind and solar farms to generate electricity which is more environmentally friendly.

Planting more ⁷ _____ is also a great way of helping to reduce the effects of climate change. Trees absorb large amounts of the greenhouse gas ⁸ _____ dioxide from the air and release it back as oxygen. Northern Ireland Water are planting one million trees across the country to help remove more of this harmful greenhouse gas from the atmosphere.

We can all help reduce the impact of climate change by making small changes at home.

Turning ⁹ _____ lights when not needed, walking instead of taking the car and ¹⁰ _____ water. All the little things can make a big difference!

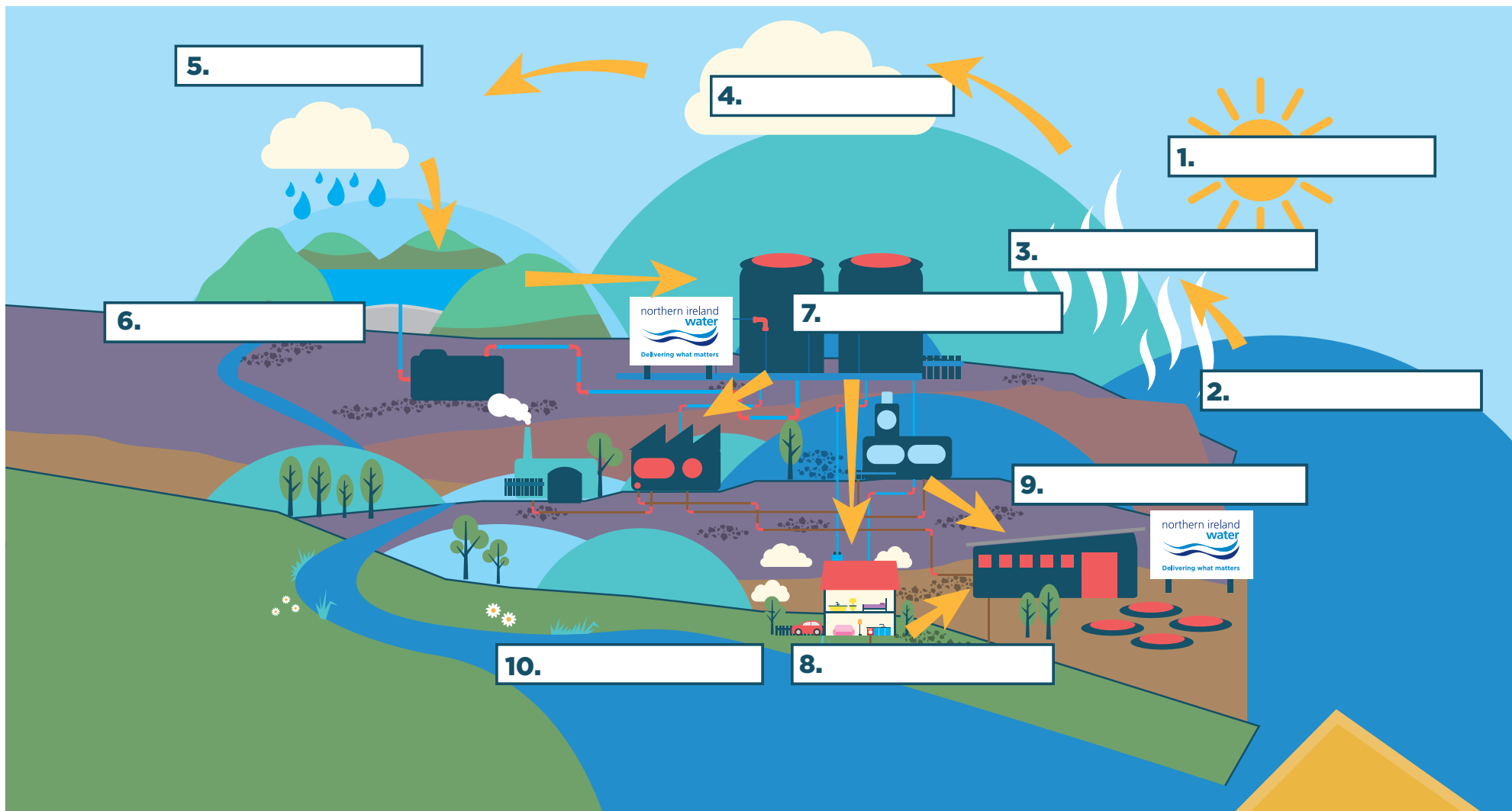
Word Bank

off	fossil	saving	carbon	trees
climate	wetter	greenhouse	melting	electricity

LOCK#1 code

1	2	3	4	5	6	7	8	9	10





Word Bank

River	Water Treatment Works	Reservoir	Evaporation	Ocean
Wastewater Treatment Works	Homes	Precipitation	Clouds	Sun

LOCK#2 code

1	2	3	4	5	6	7	8	9	10

CHALLENGE 2

Directions

Can you label all the parts of the watercycle correctly?

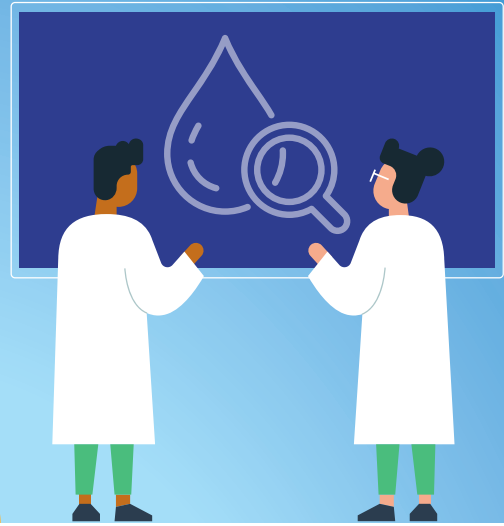
To reveal the code add the first letter of each label in the correct order into the boxes below to open LOCK#2 and move onto the next challenge.

CHALLENGE 3

We use how much water?

We all use lots of water every day but how much water do we use?

Match the activities to the number of litres it uses below. Spell out the letters in the correct order to reveal the code for LOCK #3 and move onto the next challenge. The first one is done for you.



Activity	Litres
1. Brushing your teeth with the tap off	G
2. 5 minute shower	
3. Using a hose for 15 minutes	
4. A toilet flush	
5. Bath	
6. Washing machine	
7. Brushing teeth with the tap on	

A	B	C	D	E	F	G
135 Litres	60 Litres	9 Litres	6 Litres	35 Litres	80 Litres	1 Litres

LOCK#3 code

G						
1	2	3	4	5	6	7



CHALLENGE 4

Cleaning water uses lots of energy and as NI Water is the biggest electricity user in Northern Ireland saving water not only helps to look after our water environments but also helps reduce energy use and reduce the harmful greenhouse gasses entering our atmosphere.

Answer the following **true/false** questions below to reveal the code for LOCK #4 to move onto the next challenge. Use the first letter **T** or **F** in the code - the first one is done for you.



1. Taking shorter showers helps save water and energy	
2. When making 1 cup of tea you should fill the kettle to the top with water	
3. Using a hose helps save water	
4. Turn of the tap when brushing your teeth to save water	
5. You should fix dripping taps	
6. Using wind and solar energy to help clean our water helps look after the environment	
7. Drought and Floods won't affect our water supply	
8. Saving water is not important	
9. By saving water we are also saving energy	
10. The watercycle never ends	

LOCK#4 code

T									
1	2	3	4	5	6	7	8	9	10



CHALLENGE 5

Congratulations!

You have reached your final challenge can you reveal the **secret message** using the code below to save the watercycle?



a	b	c	d	e	f	g	h	i
j	k	l	m	n	o	p	q	r
s	t	u	v	w	x	y	z	

Secret Message

Ask your teacher to email NI Water with the secret message to see if you have you have been successful in saving the watercycle from the brink of disaster!

