## Science home learning 1/6/20 - Year 3/4

This week, we would love it if you could learn about the water cycle!

We have split the ideas into five different lessons, but we appreciate that five sessions may not be possible in all households. This is a guide only! Thank you so much for supporting your child with their home learning. We hope they enjoy this home project.

**Lesson 1** – What do you know about water? Today we would like you to learn about the 4 stages of the water cycle.

Watch this video which will introduce the water cycle, whilst watching, can you spot the 4 stages?:

https://www.bbc.co.uk/bitesize/topics/zkgg87h/articles/z3wpp39

Have a look at the picture in the resources at the bottom of this document.

The 4 stages are:

1. **Evaporation** happens when warmth from the sun causes water from the sea, lakes and rivers to rise into the air and turn to vapour, which then merge together to form clouds.

2. **Condensation** happens when water vapour turns back into liquid, and forms clouds in the sky.

3. **Precipitation** is when water (which could be rain, snow, hail or sleet) falls from clouds in the sky.

4. **Run off** happens when much of this water flows into lakes and rivers, and gets carried back to the sea.

Can you find out any more information about each of the stages?

Lesson 2-You will need: A large bowl A small yogurt pot or plastic cup Clingfilm Water Small weight Sunny window sill

#### Water cycle in a bag experiment

Take the large bowl and fill it with several centimetres of water.

Place your small pot in the centre of the bowl of water, making sure not to get any water inside it.

Cover the large bowl with cling film and fasten this down securely to the side of the bowl.

Put a weight on top of the cling film, over the centre of the small pot to push the cling film down into it slightly.

Place your experiment on a warm sunny window sill and leave for a few days.

What do you think will happen? Can you spot the 4 processes that you learnt about yesterday?

(You should find that the heat of the sun evaporates the water, which rises, condenses on the cool plastic, and falls into the small container. This is a small version of what happens in the real water cycle)

**Lesson 3**- Today we would like you to create a comic strip for a drop of water. Have a think where the water will start its journey (in a lake for example!) then where does it go on its travel around the water cycle!

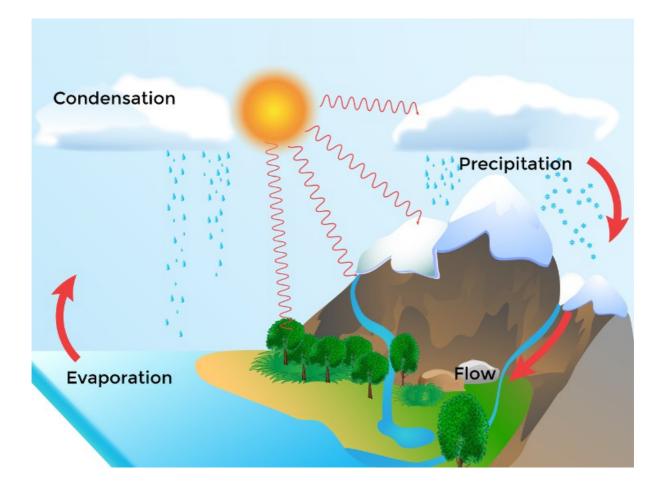
You can create your own comic strip or use the template!

**Lesson 4**- Today we would like you to draw out the water cycle! Be as creative as you want, but make sure you correctly label the 4 stages. We would love to see them when you have finished <sup>(3)</sup>

Lesson 5 – Check on your water in the bowl from lesson 2! What has happened?

Write down a method of what you did for someone else to follow it, remember to lay it out correctly with headings and subheadings. Draw pictures to go with your instructions!

#### **Resources**



## The water cycle

Water on Earth is **constantly moving**. It is recycled over and over again. This recycling process is called the water cycle.

#### 1. Water evaporates into the air

The sun **heats up** water on land, in rivers, lakes and seas and turns it into water vapour. The water vapour rises into the air.

#### 2. Water vapour condenses into clouds

Water vapour in the air **cools** down and changes back into tiny drops of liquid water, forming clouds.

#### 3. Water falls as precipitation

The clouds get **heavy** and water falls back to the ground in the form of rain or snow.

#### 4. Water returns to the sea

Rain water runs over the land and collects in lakes or rivers, which take it **back to the sea**. The cycle starts all over again.

<u>Vocabulary</u>

Water cycle

precipitation

evaporation

condensation

air temperature

air pressure

clouds

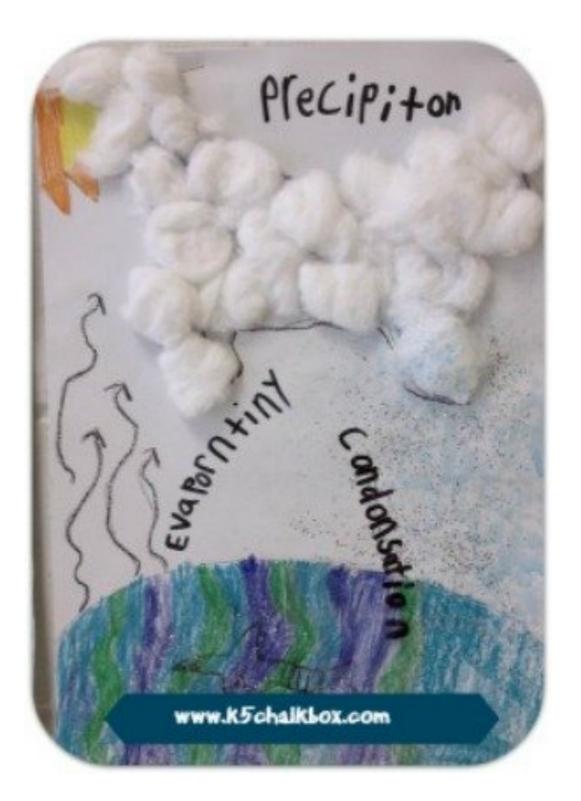
warm air

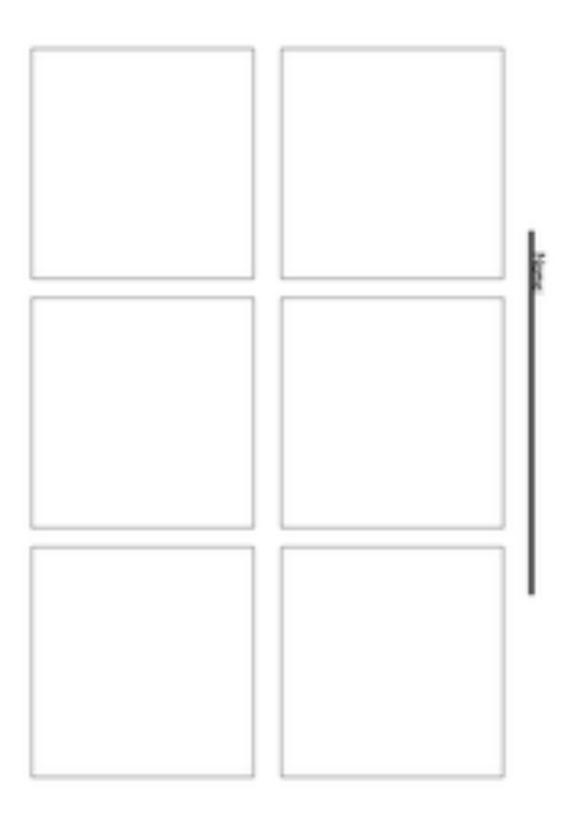
cold air

rainfall

snow

hail







# Water Cycle Wordsearch

f	С	i	s	j	C	n	k	b	r	x	у	е	r	а
z	1	0	x	d	u	р	а	k	w	е	t	v	е	е
а	h	0	n	s	u	р	g	m	g	a	x	a	v	s
t	v	a	w	d	w	0	n	s	t	р	t	р	i.	x
q	h	v	1	q	е	n	1	s	а	е	m	0	r	q
е	е	g	d	i.	r	n	f	с	m	h	r	r	у	h
t	а	v	j	s	a	0	s	р	h	t	f	a	0	x
u	t	0	h	0	e	h	е	a	k	e	n	t	е	g
а	а	q	r	g	n	r	r	d	t	0	q	i.	i.	t
i	x	a	n	а	a	a	m	e	0	i.	v	0	а	u
b	i.	a	е	t	с	0	0	1	ø	a	۵	n	e	M
n	h	C	u	m	z	q	м	x	t	Т	n	n	r.	у
с	0	r	е	Т	с	у	с	r	е	t	a	w	j	f
j	e	z	e	h	у	a	f	d	r	f	q	у	h	0
р	r	e	c	i.	р	i	t	a	t	i.	0	n	n	z

### Words to find

change of state	hail	sea		
clouds	heat	snow		
condensation	ocean	sun		
cool	precipitation	temperature		
evaporation	rain	water cycle		
flow	river			

If you have time try to use some of these words to explain how the water cycle works.