









## Home Learning — Year 2

	Strike day 1	Strike day 2	Strike day 3	Strike day 4
<b>Guided Reading</b>	Focusing on a non-fiction text about the weather below. There are 3 reading tasks focus on <b>retrieve</b> , <b>explain</b> and adding the <b>suffix ing</b> . There is also a reading task to make a poster!			
<b>English</b>	Please work through the year 2 independent learning English workbook.			
<b>Maths</b>	Exploring and using the language of capacity and volume, full, empty, half full, nearly empty. Or begin the independent learning maths workbook	Exploring water and containers—measuring in non standard units (cups) Or continue the independent learning maths workbook	Comparing capacity Or continue the independent learning maths workbook	Measuring in millilitres. Or continue the independent learning maths workbook
<b>English/ Theme</b>	<u>Weather diary</u> Can you create a weather diary over this week? Write each day of the week and describe the weather on each day. Is it rainy or cloudy? Is it warm or cold? Is it windy? What is the temperature? 	<u>Science Challenge</u>  Can you find some different materials in your house? Find something that is made of wood, metal, plastic, glass and fabric. Record your findings in a table. <u>Investigation time!</u> Think about which of these materials are waterproof and test them.	<u>Science Challenge</u>  Can you make a shelter?  You might make a den inside or a <b>waterproof</b> shelter outside. Think carefully about how you keep it up and if it will keep out the weather! Upload a picture to dojo of what you create!	<u>Science Challenge</u>  Research the famous person Charles Mackintosh. Create a fact file about him.  Sort your writing into these sections: <u>All about Charles Mackintosh</u> Write about this life, where he was born etc. <u>Waterproof material</u> What did he invent? Why is he important?

In addition to the home learning above, your child also has access to Numbots and Purple Mash in addition to the usual regular reading.

## Spellings

This weeks spelling focus is:

Drop the *e* and add *ing*

bake - baking

ride - riding

make - making

shine - shining

race - racing

phone - phoning

make - making

bake - baking

## Daily challenges

Practice telling the time

Read a story book

Count to 20 and beyond

Number bonds to 10

Days of the week

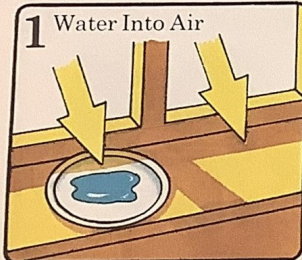
Months of the year

Handwriting practice (use your name)

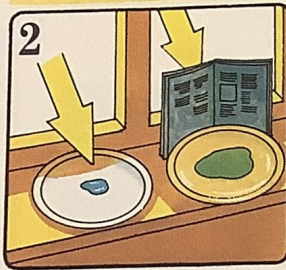


## Where Do Clouds Come From?

After a shower of rain, all the water on the roads, the grass, the houses and even your clothes, slowly dries up and disappears. The puddles get smaller and smaller until they vanish. The water disappears much more quickly when the weather is hot and sunny. When it is cold and damp, the wet things take much longer to dry. But where does the water go? And where do the rain clouds come from? How does all that water get into the sky to make rain? Here are ways to find out.



**1 Water Into Air**  
Put a big plate on a sunny windowsill. Pour some cold water on to the plate. Leave it for three hours. Look at it often and you will see the water disappears.



**2**  
Put two plates in a sunny place. Pour about half a cup of water on to each one. Shade one with a book, like this. Look at them after an hour or two to see what happens.

### Why It Works

When water dries up, it turns into tiny drops, so small you cannot see them. This is called evaporation. The water drops go into the air. This damp air, called water vapour, rises. On warm days, it rises all the time, taking the vapour up to the sky. In the sky it is much cooler than down on the ground. The tiny drops of water join up to make bigger drops. These make the clouds you see in the sky.

### Warm Air Goes Up



Cut a few strips of the thinnest paper you can find. Tissue paper or thin cellophane work well. Hold them over a radiator or room heater and they flutter upwards.

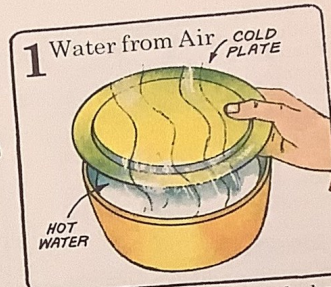
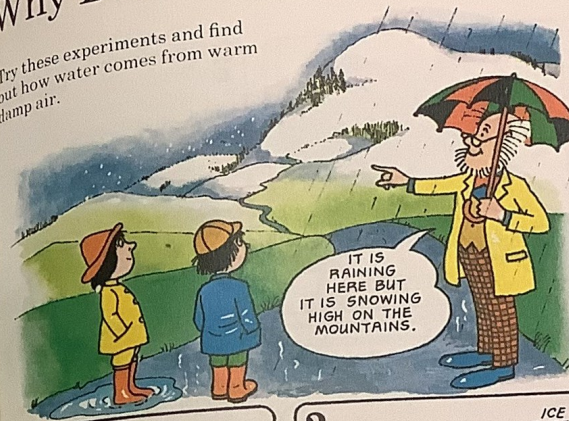
### Did You Know?



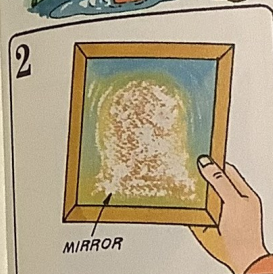
On warm days, the water in clouds falls as rain. It runs into ponds, lakes, rivers and then to the sea. Water from all wet things, even clothes on a washing line, goes up into the air. In warm weather it goes up to make more clouds which may rain again.

## Why Does It Rain?

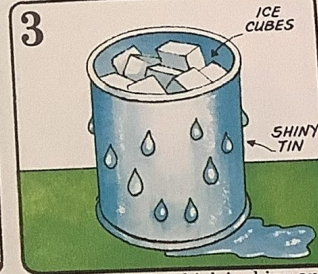
Try these experiments and find out how water comes from warm damp air.



**1** Water from Air  
Fill a bowl with water from the hot tap. Hold a cold plate over the bowl for about a minute. Turn the plate over. It is covered with tiny drops of water.



**2**  
Hold a mirror close to your mouth and breathe hard on it. Or breathe on a window pane on a cold day. Soon the glass clouds up with tiny drops of water.



**3**  
Find a clean tin which is shiny on the outside. Fill the tin with ice cubes. After a few minutes, the outside of the tin will be covered with water drops.

### Why It Works

When warm air, with lots of water vapour in it, touches something cold, the tiny water drops collect into big drops and you can see them. This is called condensation. When warm air, with lots of water vapour, rises up to meet cold air in the sky, the tiny drops of water collect round specks of dust in the air. As more collect, they make a cloud. If there is enough water in low clouds, it falls as rain.



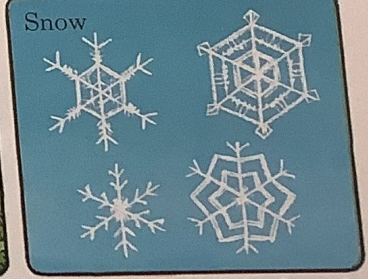
### Dew

The water drops you see on grass and leaves on some mornings are water from the air. During the night the ground gets cold and water vapour collects into drops.



### Frost

The white frost you see on a very cold morning on grass or windows is frozen dew. The water which collects on the ground and glass freezes into white ice.



### Snow

When air very high in the sky cools quickly, the water in it freezes into crystals and falls as snow. You can see the snow crystals with a magnifying glass.



## Reading Task



Read the texts carefully and answer the questions. This week our focus' are **retrieve** and **explain**. **Retrieval** is finding information.

### Where Do Clouds Come From?

1) Copy and complete the sentence from the text:

On warm days, the water in \_\_\_\_\_.



2) What would you need to carry out the warm air experiment?

3) What is evaporation?

4) When does water 'disappear' much quicker?

5) **Explain** how clouds are made?

### Why Does It Rain?

1) What could you use to see snow crystals?



2) How is condensation made?

3) Copy and complete the sentence from the text:

If there is enough water in low \_\_\_\_\_.

4) How many experiments does the text show you?

5) **Explain** why it rains?

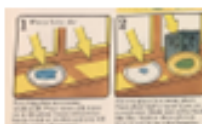
★ **Challenge question:** Is this a fiction or non-fiction text? Explain why.



## Create a Poster

Choose either '**Where do clouds come from?**' or '**Why does it rain?**' and make your own poster.

- Include an experiment
- Use key vocabulary found in the text.
- Use pictures



**Challenge question:** What else would you like to find out about clouds or rain?



This is a spelling activity:

If a word ends in **e**, we drop the **e** before adding the suffix **ing**.

love - loving

Add the suffix 'ing to each of these words.

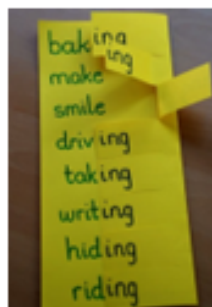
love	make	dance	move	come
live	have	write	take	hope

Correct the spelling mistakes in sentences below.

The boy was takeing a walk in the park. Other dogs kept moveing in and out of his way. The sun was danceing in the sky. This was making him happy.



★ **Challenge question:** Can you make your own suffix chart to help you remember each new spelling?



# Charles Macintosh



twinkl



# Wet Weather Wear

When it is raining, people wear special wet weather clothes.  
Which of these items would you use or wear in the rain?  
Think about the things they are made from. What do they have in common?



# Charles Macintosh

The clothes that people wear to protect them from the rain are waterproof. Waterproof fabric was invented by a scientist called Charles Macintosh. His invention was so important that raincoats are named after him!



Raincoats are called Mackintoshes, or macs.

# Charles Macintosh

Charles Macintosh was born in 1766 in Scotland.



As a young man he worked as a clerk, keeping records and doing paperwork. He did not love this job though, and in his spare time he studied science.

Charles left his job as a clerk when he was 19. He started work manufacturing chemicals, and experimented with ways to use chemicals to make new materials.



# Charles Macintosh

During one of his experiments, he found that rubber would dissolve into a liquid in naphtha, a product derived from coal tar that he was investigating.

The dissolved liquid rubber was waterproof. Charles realised it could be used to make waterproof fabric for clothes.

He painted the dissolved rubber onto a piece of woollen cloth and placed another piece of woollen cloth on top, so the rubber was sandwiched in the middle.



Charles had invented waterproof fabric!

He started to use this fabric to make waterproof coats that he called Mackintoshes.



