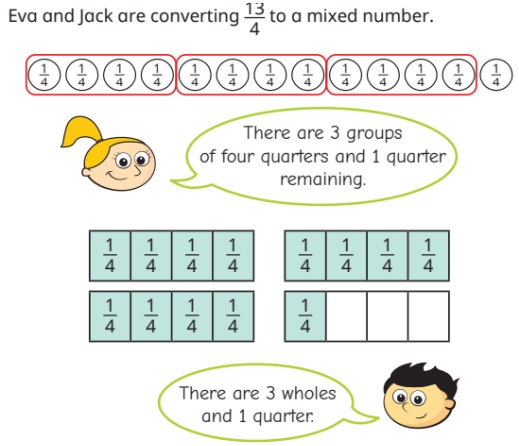
Mathematics

In mathematics this term we will be learning about fractions including; finding fractions of amounts, finding equivalent fractions, comparing fractions and adding and subtracting fractions.

Pupils will be learning to convert mixed numbers to improper fractions and vice versa.

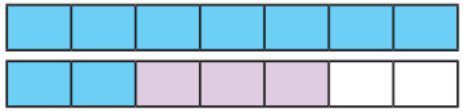


We will be learning how to compare and order fractions including mixed numbers:

- Which fraction is greater, $2\frac{1}{6}$ or $1\frac{5}{6}$?

How do you know?

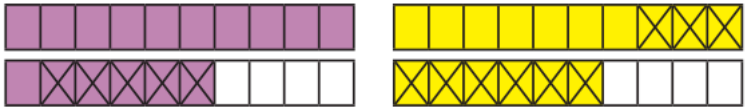
Pupils will combine knowledge of adding two or more fractions with their understanding of mixed numbers to add fractions and mixed numbers..



$$1\frac{2}{7} + \frac{3}{7} = 1\frac{5}{7}$$

Pupils will also be subtracting fractions, including when using mixed numbers:

Use the bar models to complete the calculations.



$\frac{16}{10} - \frac{5}{10}$ $\frac{16}{10} - \frac{9}{10}$

Year 4 Multiplication Check—you can support your child with their learning by encouraging them to play TT Rockstars regularly at home. Quick recall of multiplication and division facts helps children with so many areas of maths and will prepare them for the statutory check in June.

English

In English our two main writing genres will be explanation texts and story writing.

Writing Genre:	Explanation text	Story
Work:	Pupils will be writing an explanation text to show how the Water Cycle works.	Pupils will be writing a warning story set by a river where the main character ignores the danger.
Main skills and features covered:	• An opening paragraph introducing the topic area • Chronological steps explaining the processes involved • Use of Cause Effect conjunctions such as Because; When; Once • Use of Fronted adverbials • Technical Vocabulary and definitions • Diagrams and Illustrations	• Write a narrative using clear structure, setting and plot. • Paragraphs. • Fronted adverbials • Speech • Apostrophes to mark plurals and possession. • Appropriate nouns and pronouns to avoid repetition.
Ways to help at home:	Look through non-fiction texts looking at where processes or phenomenons are explained e.g. How are fossils formed? Why is the sky blue?	Discussing stories they may have read in this genre. Looking at similar stories and identifying the opening, build up, dilemma, resolution and ending. Thinking about interesting characters in stories.

Spelling: This term we will be covering: words ending in zhun spelt -sion and adding il- and revising un-, in-, mis-, dis-.

Guided Reading: Our guided reading book this term will be Rhythm of the Rain by Grahame Baker-Smith. This beautifully illustrated story teaches children about the water cycle. We will look at a variety of non-fiction and fiction books linked to rivers. With home reads please also ask your child lots of questions about what they think is going to happen, ask them to sum up what they have read and also ask questions about the characters and setting.

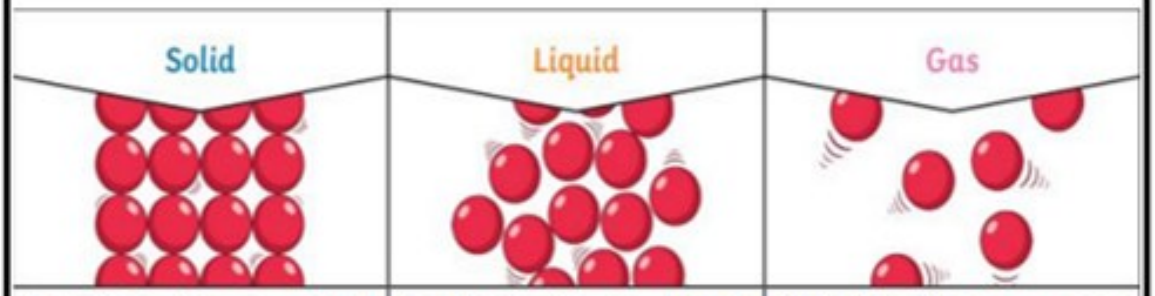
Other Subjects: In science, we will be continuing our learning about States of Matter. In computing, pupils will be learning about Data Logging. In RE, we will be answering the question 'Why is Jesus inspiring to some people?' In PE, we will be learning cricket and gymnastics. Our PE days are on Wednesdays and Thursdays. In Geography, our topic is What are rivers and how are they used? Our PSHE lessons ask the question "How can I communicate with friends safely?". In art, we will be looking at Painting and Mixed media. World Book Day will be celebrated on 6th March. In music, we have an exciting project organised by the English National Opera. Children will be composing a piece of music which will be sent to the ENO.

Y4 – States of Matter

Prior Learning	
1	• Distinguish between object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, water and rock. • Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of everyday materials on the basis of their physical properties.
2	• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
3	• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • Describe in simple terms how fossils are formed when things that have lived are trapped within rock • Recognise that soils are made from rocks and organic matter.

I can	States of Matter - Year 4
Compare and group materials together, according to whether they are solids, liquids or gases	
Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)	
Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	

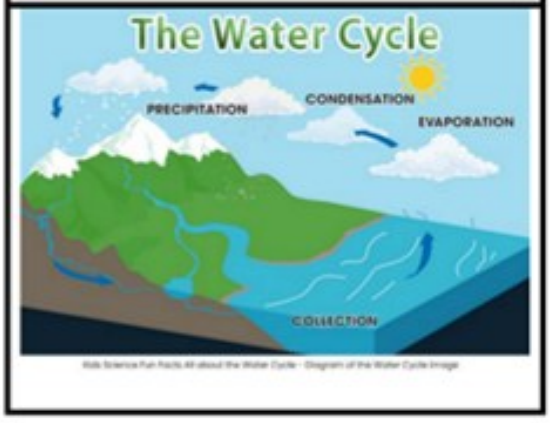
The properties of different states.



Solid	Liquid	Gas
Particles in a solid are close together and cannot move. They can only vibrate.	Particles in a liquid are close together but can move around each other easily.	Particles in a gas are spread out and can move around very quickly in all directions.

Materials can **change** from one state of matter to another when **heated** or **cooled**.

The Water Cycle



Key Vocabulary	
States of Matter	Materials can be one of three states: solid, liquid or gas.
Changing state	When a material moves from one state to another and back again.
Solid	A substance that has a fixed shape and volume.
Liquid	A substance that flows freely and takes the shape of the container.
Gas	A state of matter that has no defined shape or volume.
Temperature	How hot or cold something is.
Water vapour	This is water that takes the form of a gas. When water is boiled it evaporates into a water vapour.
Melt	When a solid changes to a liquid.
Freeze	When a liquid changes to a solid during the freezing process.
Evaporation	When water is heated and turns into water vapour.
Condensation	When water vapour cools and turns back into water.
Precipitation	Liquid or solid particles fall from a cloud as rain, sleet, hail or snow.

Term 4 Spelling foci and word lists:

Unit 9: Words ending in zhun spelt -sion

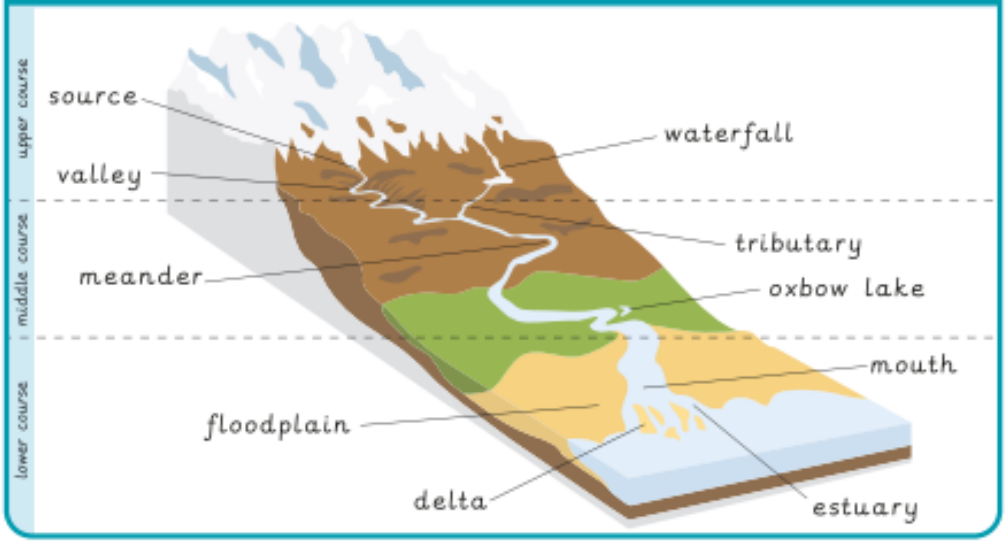
Unit 10: Adding il- and revising un-, in-, mis-, dis-

Y4 Special focus 4: Homophones

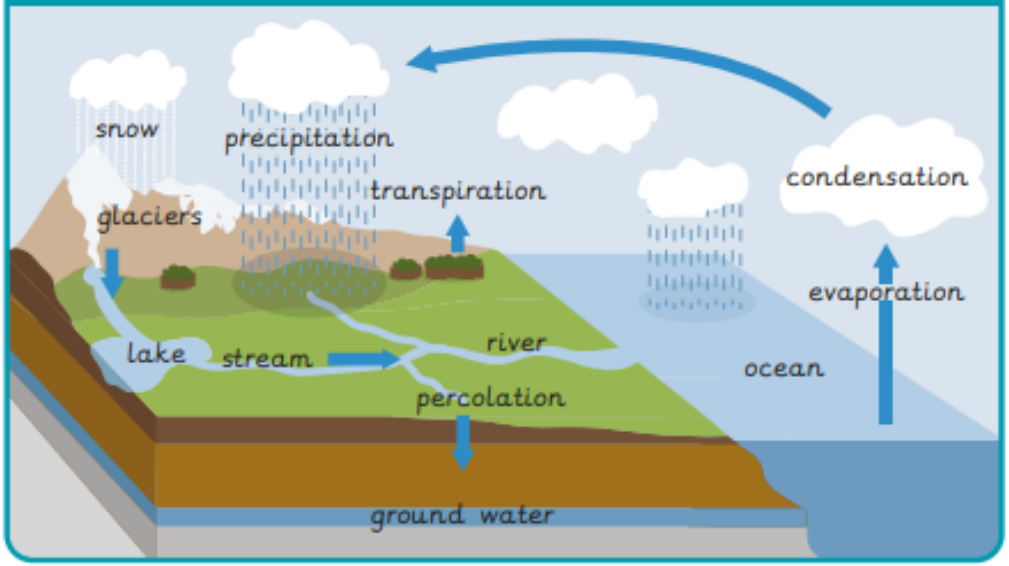
Unit 9 word list	Unit 10 word list	Year 3 and 4 statutory words
collision decision erosion confusion division explosion invasion television	disagree dislike disqualify disappear disobey illegal illegible illogical impolite illiterate impatient impractical incomplete unclear incorrect unkind	possible potatoes pressure probably promise purpose quarter question recent

What are rivers and how are they used?

River courses and features



The water cycle



How are rivers used?

- Rivers are important habitats for plants and animals.
- They provide a supply of food and drink for humans and animals.
- Rivers can help crops grow by dispersing nutrients and making soil more fertile.
- They offer transport routes for people and goods.
- Rivers can be used for leisure activities such as boating, swimming, fishing and many other fun activities.
- Many settlements and communities are built along rivers.
- Some people live on rivers in houseboats.
- Water from rivers can be used for irrigation on farmland.
- Renewable energy, called hydroelectric power, can be generated by moving water.

What are rivers and how are they used?

evaporation	The process in which warm water turns from a liquid to a gas in the air (water vapour).
condensation	The process in which water vapour rises in the air, cools down and turns into small water droplets.
precipitation	The process in which water falls from clouds to the ground, in the form of rain, sleet, snow or hail.
delta	A wide area near where a river meets the sea which features a build-up of sand and sediment.
estuary	The area where fresh water from a river meets salt water from the sea.
floodplain	Areas of flat land on either side of a river that can become flooded if the river gets too full.
meander	A bend or curve in a river.
oxbow lake	A bend in a river that has been separated from the main river.
river mouth	The place where a river flows into the sea.
source	The place where a river starts.
tributary	A stream that flows into a larger stream or river.
valley	An area of low land between two hills or mountains, usually with a river running through it.

Longest river in the UK:

The River Severn.

Longest river in **the** world:

The River Nile, Africa.