Mathematics

In mathematics this term we will be making links between our previous fraction learning and last term's decimal work. We will then use our decimal work to help answer problems involving money. At the end of the term, we will be moving on to looking at time. You can help your child at home by practicing the common fraction-decimal equivalents and asking your child to read an analogue clock when required.

Decimals

This term, students will explore tenths and hundredths and be able to match common fractions to their decimal equivalent. They will be able to explain how to divide whole numbers by 10 and 100 using a place value chart.

We will then apply this decimal knowledge to reasoning based questions that challenge the children's understanding. An example of a reasoning problem for this term is below.

Complete the number sentences.

$4 \div 10 = 8 \div \_\_\_\_\_ \div 10$

$15 \div 3 \div 10 = \_\_\_\_\_ \div 10$

$64 \div \_\_\_\_\_ \div 10 = 32 \div 4 \div 10$

$\_\_\_\_\_ \times 10 = 6$

Use five counters and a place value grid. Place all five counters in either the ones or the tenths column.

How many different numbers can you make?

Describe the numbers you have made by completing the stem sentences.

There are ☐ ones and ☐ tenths.

☐ ones + ☐ tenths = ☐

Ones	Tenths

Money

Pupils will use their decimal knowledge to help answer problems involving money. Here is an example:

Dani has £3

Nijah has 75p

Huan has £2 and 20p

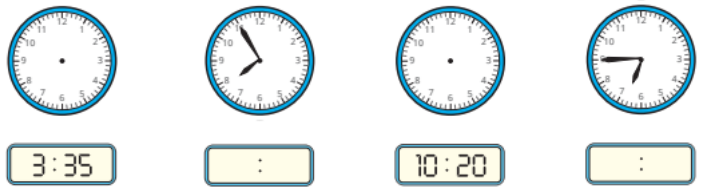
How much money do they have altogether?

Write your answer as a decimal.

Within this unit, children will be comparing analogue times to digital times. We will also be introducing the 24-hour clock

An example of a task your child may try this term is below:

Complete the clocks so that the analogue clocks and digital clocks show the same time.



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 ***newspaper writing*** and ***persuasive writing***

Writing Genre:	Newspaper writing	Persuasive writing
Work:	Pupils will be looking at the story *The Iron Man by Ted Hughes* and will write a newspaper article based on the first chapter.	Pupils will write persuasive arguments based on the later chapters of The Iron Man by Ted Hughes. They will need to decide if the Iron Man should be freed and allowed to live with the villagers.
Main skills covered	Pupils will look at the key features of newspaper writing and learn how to write formally focusing on: Writing in the past tense Paragraph structure Use of fronted adverbials Quotations Rhetorical questions And the impact images and captions can have on the audience	Pupils will be taught how to write persuasive arguments either for or against the freeing of The Iron Man. They will learn: How to hook their reader How to emphasize their point Variety of persuasive language Repetition Rhetorical questions
Ways to help at home:	Look out for interesting newspaper articles that you can read with your child at home and pick out the key features. Can they spot the headline and the introductory paragraph? If so, ask them if they can spot the 5Ws (what, why, where, who and when)	When we teach this skill, discuss with your child whether they are persuading for or against The Iron Man's release. Talk to them about their reasons either for or against and help them form structured arguments.

Spelling: This term we will be covering: Adding il- and revising un-, in-, mis-, dis- , the c sound spelt -que and the g sound spelt -gue and adding the ir- to words beginning with r. Each week, your child will be set spelling homework on Doodle which links to the spelling pattern we are learning in class.

Guided Reading: Our guided reading book this term will be The Iron Man by Ted Hughes. It tells the story of a young boy called Hogarth who discovers an Iron Man eating all the metal in his village. This is an exciting book with a fantastic twist and moral discussion at the end. We will be making predictions about what we think will happen, summarising key events and answering retrieval questions about the characters, plot and setting. 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: This term, our science topic is electricity. In computing, pupils will be learning about *Creating Media—photo editing.* In RE we will be continuing the unit answering the question – 'Why is Jesus inspiring to some people?' In PE we will be learning athletics and tennis. Our PE days will be Tuesday and Thursday. In history we will be answering the question "Were the Vikings raiders, traders or settlers?" . Our PSHE lessons ask the question "How can our choices make a difference to others and the environment?" In art, we will be looking at drawing and printing. DT links with science as the children make a working torch. In music, children will compose using the pentatonic scale.

ELECTRICITY

Common Electrical Hazards

1. Overloading a plug extension socket.
2. Exposed wires.
3. Damaged wall sockets.
4. Wires left along the carpet for people to trip over.
5. Placing metal into electrical appliances or open sockets.
6. Electrical appliances and wires near water.

NOTE: WATER IS AN EXCELLENT ELECTRICAL CONDUCTOR SO IT CAN BE VERY DANGEROUS TO HAVE ELECTRICAL DEVICES NEAR WATER

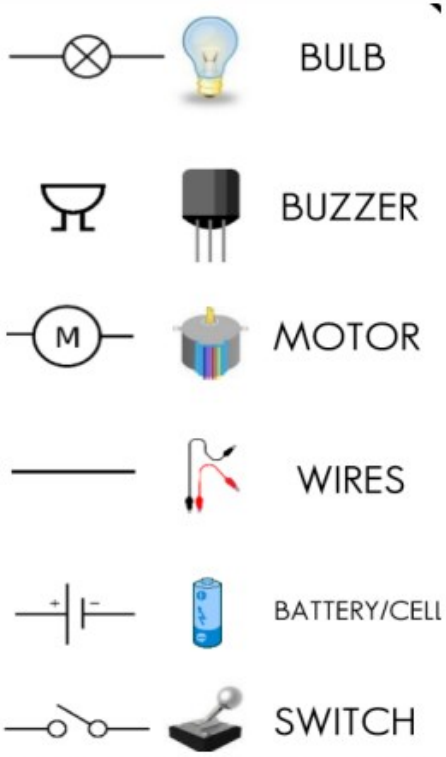
Thomas Edison (1847-1931)

Thomas Edison was born in 1847 and died in 1931. He lived in the state of New Jersey in the United States of America (USA)

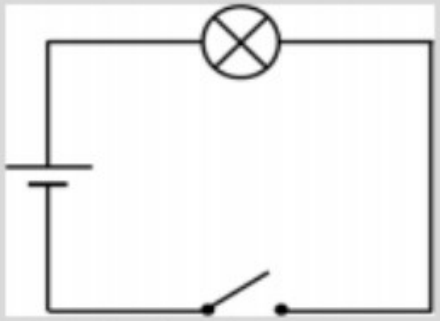
He is known as one of the greatest inventors in history.

He invented the **light bulb**, the **phonograph** (which could record and play sound) and an early video camera called the **Kinetograph**. The films were then watched on a **Kinetoscope** which he also invented.

Electrical Circuit Symbols



A scientific diagram of an open circuit:



The light bulb will not light in this circuit until the switch is closed.

Vocabulary

circuit	A complete route which an electric current can flow around.
current	A flow of electricity through a wire.
physics	The study of forces including electricity and the way it affects objects.
battery	A small device that provides power for electrical items.
cell	A device used to generate electricity. A battery is an example of a cell.
conductor	Any material that electricity can pass through or along.
insulator	Any material that electricity cannot pass through or along.
buzzer	An electrical device that makes a buzzing sound.
motor	A device that changes electrical energy into movement.
wire	A long thin piece of metal that carries an electrical current often covered in plastic for safety.
voltage	An electrical force that makes electricity move through a wire, measured in volts (V).
socket	A device on a wall that you can plug electrical equipment into.

Electrical Conductors	Electrical Insulators
Copper	Rubber
Iron	Wood
Steel	Plastic
Silver	Paper
Gold	

Were the Vikings raiders, traders or settlers?

balanced	Considering all views in a fair way.
bias	Allowing personal opinions to influence a viewpoint.
cause	Something that makes an event happen.
consequence	The result of an event.
Danelaw	The northern, central, and eastern regions of England controlled by the Vikings.
longboat	A long, narrow Viking boat powered by oars or sail.
one-sided	A viewpoint which shows only one side of an argument.
perspective	The way a person thinks about something.
Viking	A group of Scandinavian people who lived in the eighth to the eleventh centuries.

traders

Using longboats, the Vikings established trading routes throughout Europe and as far as America, Iraq and Jerusalem. They sold items like timber, wheat, wool, fur and fish; and exchanged them for silver, spices, wine, jewellery, silk and glass.

Raiders

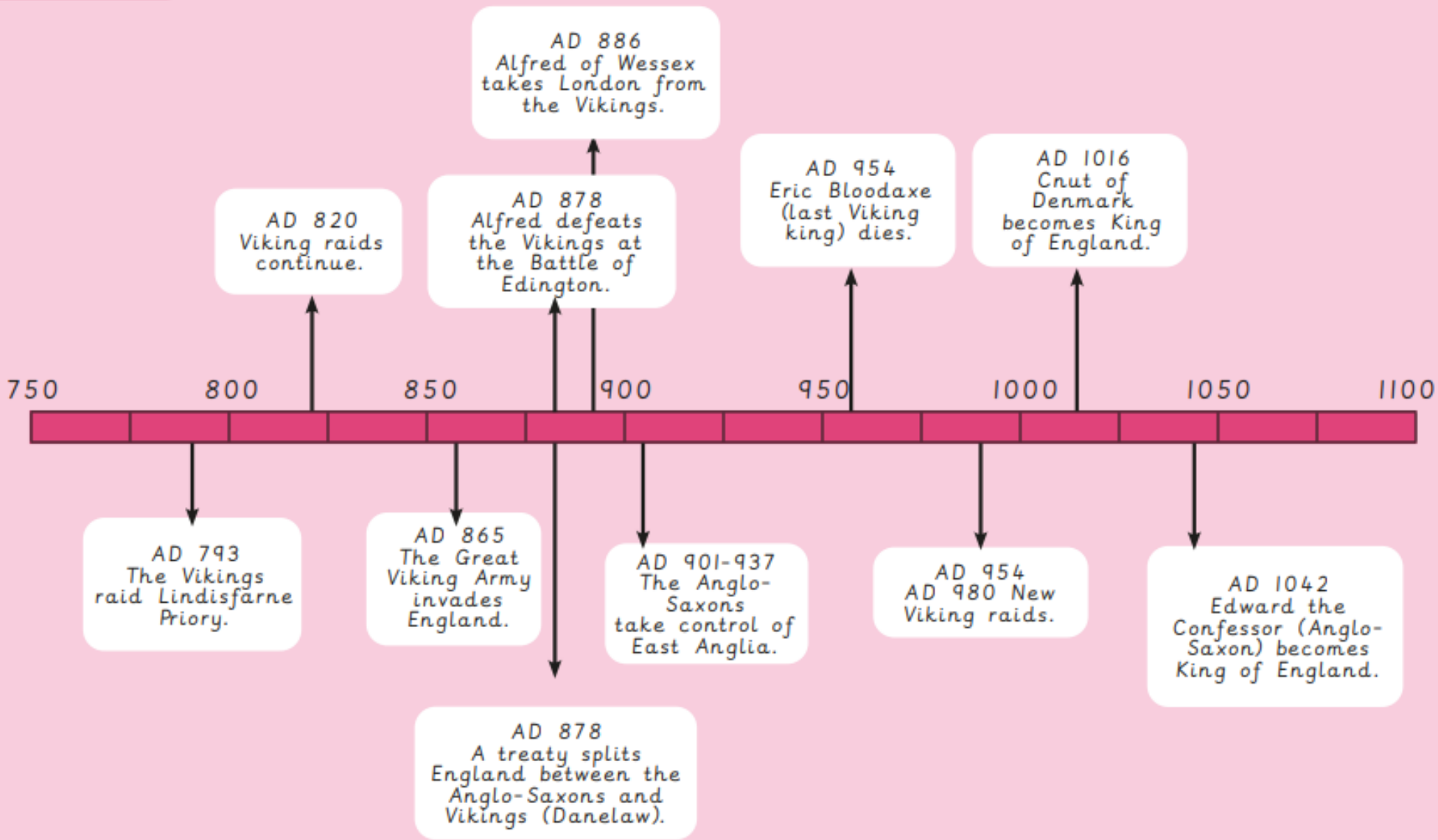
The Viking raids of Britain started in AD 793 when Lindisfarne's monastery was attacked. In general, the Vikings raided in the summer when it was easier to cross the sea. They stole valuable items from monasteries and villages, and they enslaved people before returning home. For the Vikings, raiding demonstrated bravery - a characteristic they valued highly.

Settlers

In Britain, the Vikings started to stay over the winter months. Eventually, they settled down on land they had seized in eastern and northern England. Sometimes, the Anglo-Saxons gave them land to stop the Vikings from attacking them. In AD 878, Alfred the Great made a peace deal with the Vikings which split England into Anglo-Saxon and Viking-controlled areas. The Viking area, known as Danelaw, was settled and peaceful.

Were the Vikings raiders, traders or settlers?

Timeline



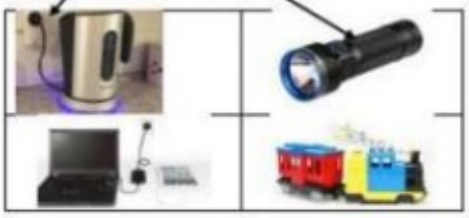
Y4 – Electricity

Prior Learning	
1	**Everyday Materials – I can** distinguish between an object and the material from which it is made'
2	**Properties of materials – I can** Identify and compare suitability of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
3	**Year 3 – Light** – I can notice that light is reflected from
4	**Year 4 - Sound** – I can identify the way that sound is a made through vibration *it travels.*

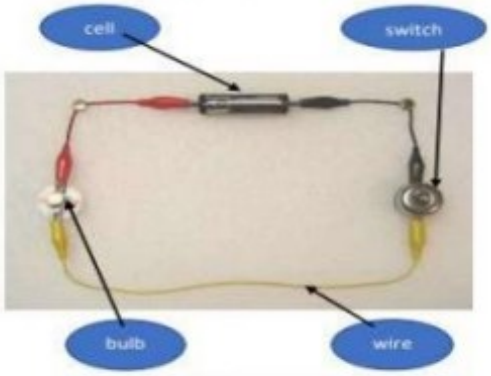
I can	Electricity - Year 4
•	identify common appliances that run on electricity
•	construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
•	identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
•	recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
•	recognise some common conductors and insulators, and associate metals with being good conductors

Appliances that run on electricity

Some plug into the mains and others run on batteries.



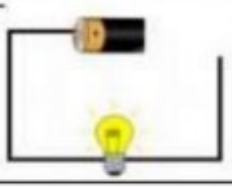
Electrical circuit with a bulb



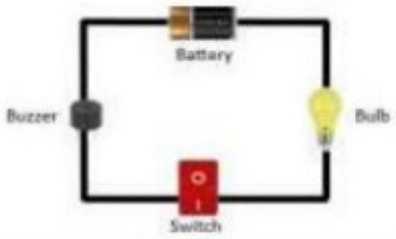
The switch opens and closes the circuit. The bulb lights in this circuit because the switch is on.

Significant scientist	
Thomas Edison *(1847-1931)* 	Thomas Edison was an American inventor. He is sometimes described as America's greatest inventor. He invented the first practical incandescent light bulb.

This circuit will not work as it is not complete.



This circuit is complete so the buzzer will sound and the bulb will light.



Conductors and insulators

Conductors

Some materials let electricity pass through them easily. These are known as electrical conductors. Many metals are good electrical conductors, such as iron, copper and steel.

Insulators

Some materials do not allow electricity to pass through them. They are known as insulators. Plastic, wood, rubber and glass are good electrical insulators.

Key Vocabulary	
Electricity	A form of energy used for lighting, heating, making sound and making machines work.
Appliances	A device or equipment used for a particular job such as a washing machine or mobile phone
Cell or Battery	A device that stores electrical energy as a chemical – a cell is a single unit and a battery is a group of cells.
Circuits	This consists of a cell connected to one or more components using wires. It needs to be a complete circuit to work.
Switch	This can be added to a circuit to turn a component on or off. It allows the electricity to flow or it stops it.
Conductor	Materials that allow electricity to pass through.
Insulator	Materials that do not allow electricity to pass through.
Components	The parts of a circuit such as cell, light bulb, buzzer, motor and wires