Year Six - Electricity
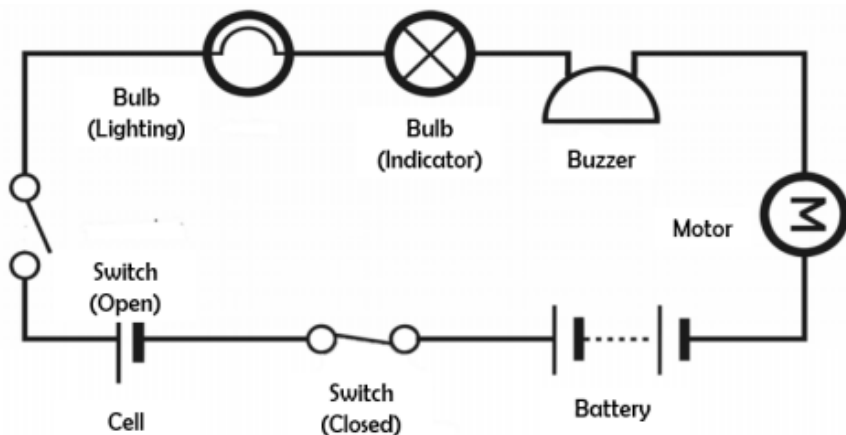
How does this link to my previous learning?

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

National Curriculum Links:

Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

Use recognised symbols when representing a simple circuit in a diagram.

What key vocabulary will I learn:

Bulb (Lighting)
Bulb (Indicator)
Buzzer
Motor
Switch (Open)
Switch (Closed)
Cell
Battery

When drawing electrical circuits, you should use the standard symbols to show the different components.

What will I know by the end of this unit:
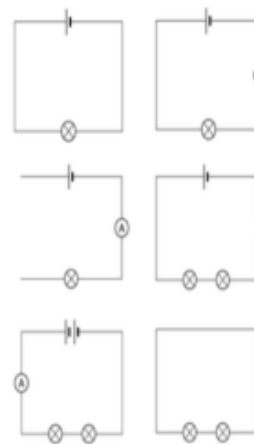
When changes are made to circuits, components can function differently:

-When switches are open or wires are removed from a circuit (so that it is no longer a closed circuit), bulbs and buzzers will turn off. You can use crocodile clips to investigate adding and removing wires.

-When more batteries or cells are added (or batteries or cells are included with a higher voltage) the brightness of bulbs and the volume of buzzers will increase.

-When more bulbs are added to a simple circuit, they will be dimmer than if there were one bulb. This is because the electricity is shared between the two bulbs. More voltage would be needed to make them brighter.

You should be able to look at circuits like those on the left, and work out what would happen.

Hanslope Primary School
Summer 1

History Knowledge Organiser

Year 6: Who should go onto the bank note?

How does this link to my previous learning?

- Links to How have children's lives changed?

How does this link to my future learning?

- This helps to prepare you for secondary history subjects and knowledge

What key vocabulary will I learn:

- Alan Turing
- Criteria
- Issuing bank
- Historically significant
- Jane Austen
- Joseph William Turner
- Remarkable
- Remembered
- Watermark
- Winston Churchill
- Lily Parr
- Betty Snowball

What will I know by the end of this unit:

- To know that members of society standing up for their rights can be the cause of change.
- To understand that there are different interpretations of historical figures and events.
- To understand how the monarchy exercised absolute power.
- To understand the process of democracy and parliament in Britain.
- To be aware of the different beliefs that different cultures, times and groups hold.
- To understand the changes and reasons for the organisation of society in Britain.
- To understand how society is organised in different cultures, times and groups.
- To be able to compare development and role of education in societies.
- To understand the changing role of women and men in Britain.
- To understand the development of global trade.
- To understand that people in the past were as inventive and sophisticated in thinking as people today.
- To be able to identify the achievements of civilisations and explain why these achievements were so important.
- To be able to compare the achievements of different civilisations and groups.

Year 6: Sensing movement

How does this link to my previous learning?

- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
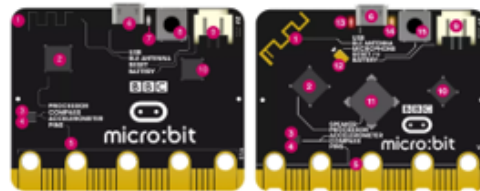
National Curriculum Links:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

How does this link to my future learning?

- Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.

What key vocabulary will I learn:

Micro:bit - The BBC micro:bit is a pocket-sized computer that introduces you to how software and hardware work together.

MakeCode - A free online learn-to-code platform where anyone can build games, code devices, and mod Minecraft!

Output - a place where power or information leaves a system.

Variable - able to be changed or adapted.

Code - program instructions.

Test - the process of evaluating and verifying that a software product or application does what it's supposed to do.

Debug - identify and remove errors from (computer hardware or software).

Algorithm - a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

Accelerometer - The micro: bit's accelerometer measures forces in 3 dimensions, including gravity, so your projects

What will I know by the end of this unit:

- To create a program to run on a controllable device.
- To explain that selection can control the flow of a program.
- To update a variable with a user input.
- To use a conditional statement to compare a variable to a value.
- To design a project that uses inputs and outputs on a controllable device.
- To develop a program to use inputs and outputs on a controllable device.

Hanslope Primary School
Summer 1

PE Knowledge Organiser

Year 6: Physical skills and Athletics

National Curriculum Links:

- Enjoy communicating, collaborating and competing with each other and develop an understanding of how to improve in an activity.

- Develop strength, control and balance, and technique.

- Play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.

How does this link to my previous learning?

- Build upon Y5 Athletics and physical skills

How does this link to my future learning?

- Prepares you for secondary school PE
- Consolidation of all prior learning

What key vocabulary will I learn:

- Control
- Technique
- Communication
- Speeds
- Directions
- Relay
- Accuracy
- Competition,
- Safety
- Pressure
- Pattern
- Pace
- Power
- Possession,

What will I know by the end of this unit:

Physical skills:

- I can achieve good take off and height.
- I can land with balance and control.
- I can land softy and quietly.
- I can balance with stability and control.
- I can balance and move with smooth, controlled movements.
- I can repeat balances with consistent performance.

Athletics:

- Develop and improve their techniques for jumping for height and distance and support others in improving their performance
- Perform and apply different types of jumps in other contexts
- Set up and lead jumping activities including measuring the jumps with confidence and accuracy
  Perform and apply a variety of skills and techniques confidently, consistently and with precision

Hanslope Primary School
## Music Knowledge Organiser

Year 6: Baroque

How does this link to my previous learning?

This links to previous learning in year 6: Themes and variations (Theme: Pop Art)

What key vocabulary will I learn?
- Baroque period: The years between 1600-1750 when a particular type of music was being composed across Europe.
- Ostinato: A repeating part; can be a tune or a rhythm.
- Polyphonic: A musical texture in which different parts weave in and out of each other.
- Opera: A dramatic performance in which a story is told using music and singing.
- Oratorio: A dramatic vocal work on a religious theme, like an opera, but sung without staging.
- Recitative: A section of an opera or oratorio where the sung melody imitates speech.
- Fugue: Music in multiple parts where a main theme (subject) and secondary theme appear over and over in different parts and at different pitches.
- Ground bass: A repeating melody in the bass part, usually played by a cello and mostly commonly found in Baroque music.

treble clef	bass clef
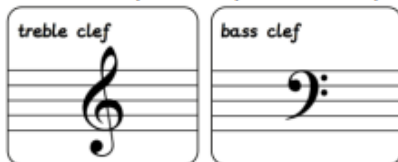
National Curriculum links:

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with accuracy, fluency, control and expression.
- Improvise and compose music for a range of purposes using the inter-related dimensions of music
- Listen with attention to detail and recall sounds with increasing aural memory
- Use and understand staff and other musical notations
- Appreciate and understand a wide-range of high-quality live recorded music drawn from different traditions and from great composers and musician
- Develop an understanding of the history of music

How does this link to my future learning?

This links to future learning in Summer 2: Composing and performing a leavers song.

What will I know by the end of this unit:

- Define some key features of Baroque music, including recitative, canon, ground bass and fugue.
- Take part in a vocal improvisation task based on Baroque recitative.
- Play several parts of a canon using staff notation, with or without letter names.
- Compose a ground bass melodic ostinato.
- Notate a ground bass pattern using staff notation.
- Name some well-known Baroque composers and describe what musical features they were known for.
- Learn a fugue part by reading staff notation, with or without note names.
- Perform a fugue.

Hanslope Primary School
Design Technology Knowledge Organiser

Year 6 - Electrical systems
(complex switches and circuits – programming monitoring and control)

Overview:

More Complex Switches and Circuits

Electricity is a type of energy. It is used to power lots of things.

-Electricity can flow through circuits. A circuit is the path the electric current follows. It must have no breaks in it (a closed circuit) for electricity to flow. The symbols for different objects in electrical circuits are shown below.

-The electricity flowing through a circuit is known as the current. It can be used to power an output device.

-Switches can be positioned so that electrical currents can flow through them (closed switch) or cannot flow through them (open switch). This alters the way that output devices function.

-In a series circuit, two output devices are controlled by one switch. In a parallel circuit, two output devices can be controlled separately by switches.

Switches can be used alongside control boxes, to set up timed systems (e.g. traffic lights) and monitoring systems (e.g. alarms).

What key vocabulary will I learn:

function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype
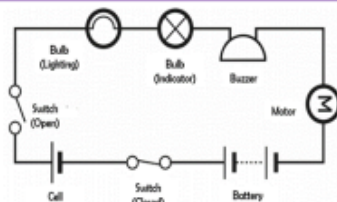
National Curriculum Links:

- Design, make and evaluate products.
- Technical knowledge: understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

What steps will I follow to create my final product?

Designing: - You need to think about who your product is for – what is its purpose and who is going to use it?

-Consider which type of circuits you will need to use.

-In a series circuit, there is only one path which the electricity follows. The electricity flows from the input source, around one path (on which the components are positioned) and returns to complete a closed circuit.

-In a parallel circuit, the components are positioned on different branches of the wire. If one component breaks or becomes disconnected, the other components can still work.

In designing you should be able to sketch and annotate different ideas, and should also be able to create either a making checklist, a storyboard, or a flowchart.

Making:

-In addition to the making skills that you used throughout your electrical systems DT topics in lower KS2, you also need to learn how to write a sequence of instructions using a control program.

-This 'control language' or flowchart enables the system to act in a particular way e.g. when a switch is pressed.

-You will develop an understanding of using standalone/ interface control boxes

Evaluating:

How well does your electrical system work? Does it work as planned? Does it meet its purpose? What would your audience think about your product? What would they like about it? What would they not like? What type of switch did you choose to use? Why? What are the pros and cons of this type of switch? What instructions did you input into your control box? How did this work? What could you still improve about your product? How would you do things differently next time?

Hanslope Primary School
Religious Education Knowledge Organiser

Year Six- Can we know what God is like?

How does this link to my previous learning?

- **Year Five**- Does the community of the Mosque help Muslims lead better lives? What is best for our world?
- **Year Four**- Did Jesus really do miracles?
- **Year Two**- How should you spend the weekend?
- **Year One**- Does Creation help people understand God?

How does this link to my future learning?

- Key Stage Three: Further exploration of Christianity, alongside Sikhism and Buddhism.

What key vocabulary will I learn:

God- a supernatural being that is considered divine or sacred

Prayer- a request for help or expression of thanks addressed to God or another deity

Faith- complete trust or confidence in someone or something

Shahadah- the Muslim profession of faith. One of the Five Pillars of Islam

Revelation- revealing of truth through communication with God

What will I know by the end of this unit:

- Key beliefs about God expressed by Muslims and Christians and the source of some of these beliefs
- The significance of the Shahadah and be able to compare the beliefs of Muslims and Christians about God
- Conclusions about the differences that the beliefs make to the lives of followers
- Ways in which Muslims and Christians seek to know God and express their beliefs – in art, calligraphy and by their lives
- The role of prayer, worship and revelation in getting to know God
- The Qur'an contains the 99 names for Allah which describe his character; the existence of Allah is also believed to be revealed in nature
- Some quotes from the Qur'an such as: **Surah 112.1-4:** *In the name of God, the Gracious, the Merciful. 1. Say, "He is God, the One. 2. God, the Absolute. 3. He begets not, nor was He begotten. 4. And there is nothing comparable to Him."*
- Muslims believe that they can get to know God by reading the Qur'an, reciting the daily prayers and obeying the other tenets of their faith
- There is a requirement to believe in the "unseen" and so belief in God requires faith as humans are unable to understand everything
- Only God is perfect
- Most Christians also believe that they can know God through prayer, revelation, worship and nature, but also believe that Jesus is the ultimate expression of God, being God Incarnate

Hanslope Primary School
MFL Knowledge Organiser

Year 5 and Year 6 – El tiempo

National Curriculum Links:
- listen attentively to spoken language and show understanding by joining in and responding
- explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words

How does this link to my previous learning?
I will talk about the weather on each day of the week and use my knowledge of Spanish numbers to say the temperature. I will also increase my understanding of Spanish geography and be able to name and locate Spanish and Latin American cities.

How does this link to my future learning?
I will build on this vocabulary when learning about Latin American countries next year and continue to use this vocabulary to talk about hobbies and routines.

What key vocabulary will I learn:

el tiempo (*the weather forecast*)
hace sol (*it is sunny*)
hay nubes (*it is cloudy*)
hace calor (*it is hot*)
hace frío (*it is cold*)
llueve (*it is raining*)
nieva (*it is snowing*)
hay viento (*it is windy*)
hay niebla (*it is foggy*)
hay tormenta (*it is stormy*)

En (city), ... (*In (city), it...*)
Days of the week
España (*Spain*)
(*Main cities in Spain*)
el invierno (*winter*)
la primavera (*spring*)
el verano (*summer*)
el otoño (*autumn*)
hay (*there is*)
las estaciones (*the seasons*)
Numbers 0–30

¿ Qué tiempo hace <u>hoy</u> ? (*How is the weather today?*)
Hoy (*Today...*)
Hace (number) grados. (*It is (number) degrees.*)

¿ Qué tiempo hace en la primavera/el verano/el otoño/el invierno ?

(*How is the weather in spring/summer/autumn/winter?*)

En la primavera/el verano/el otoño/el invierno, ...(*In spring/summer/autumn/winter, it...*)

Buenos días, voy a presentar el tiempo de hoy. (*Good morning , I'm going to present today's forecast.*)

What will I know by the end of this unit:

I will be able to:

- Name weather conditions and seasons.
- Name and locate the main cities in Spain and Latin America.
- Describe the forecast with weather conditions and temperatures.
- Pronounce the vocabulary accurately.
- Recognise the vocabulary when written.
- Show understanding when hearing the words.
- Label the pictures, using matching activities.
- Take part in a role play (present the forecast with a partner).
- Ask someone how the weather is.
- Answer the question appropriately.

I will be able to play more elaborate games with my growing vocabulary.