

Year 4 Knowledge Organisers
Spring 2
2025



Hanslope Primary School Design Technology Knowledge Organiser

Year 4: Electrical systems (simple circuits and switches – programming and control)

Overview:

Simple Circuits

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

-Electricity can flow through wires and cables. It can also be stored in batteries or cells.

-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 electricity flowing through a circuit is known as the current. The current can be deliberately allowed to flow or broken using a switch.



How does this link to my future learning?

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

What key vocabulary will I learn:

Simple Circuit	Battery/ Cell
Switch	Switch
Current	Input/ Output Device
Short Circuit	Conductor
	Insulator

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]

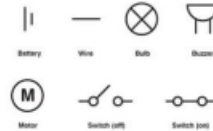
What steps will I follow to create my final product?

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

-Consider the materials that you will use – what type of input device (e.g. battery/cell), conductor (e.g. wires) and output device (e.g. bulb) are best for your purpose and audience?

-Consider whether to create a homemade switch or use a bought switch.

As a part of the design process, you should be able to sketch and annotate different ideas. You should also be able to plan the main stages of making, using either a checklist, a storyboard, or a flowchart.



Making:

-In order to ensure that your circuit is closed, it is hugely important that your connections are secure.

-Connecting blocks and bulb holders are useful pieces of equipment for ensuring this.

-Twisting strands of wire and taping wire are also useful strategies for creating a secure connection.



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

Health and Safety

-Remove any jewellery and tie back long hair. Wear an apron.

-Do not put fingers or objects in outlets.

-Never use anything with a plug, wire or cord around water.

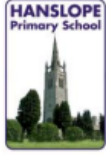
Keep metal objects away from electrical heat sources – e.g. knife away from toaster.

Never pull a plug out by its cord.

Follow electrical signs and guidance carefully.

Return all equipment to the correct zoned areas of the classroom/ workshop.

Remember that electricity can cause burns, shocks, serious injury & even death.



Hanslope Primary School Science Knowledge Organiser Spring 2

Year 4: Living things and their habitats

How does this link to my previous learning?

- All around us, there are some things that are alive, some things that are dead, and some things that have never been alive.
- All living things have certain characteristics that help to keep them alive and healthy.
- Living things live in habitats that suit them, and which provide for their basic needs.
- Living things depend on other living things in order to survive.

Classification of animals:

Mammals -Mammals are warm-blooded. -They often have hair/fur on their bodies. -Mammals give birth to live young. -Mammals often drink milk from their mothers.	Snails -Snails have shells. -They have a large muscular foot, which secretes mucus. -Their stomach is directly above their muscular foot. -Most snails live underwater.
Reptiles -Reptiles are cold-blooded. -They normally lay eggs (but some don't). -Reptiles have scales or scutes.	Slugs -Slugs do not have shells. -They have a large muscular foot, which secretes mucus. -Their stomach is directly above their muscular foot.
Amphibians -Amphibians are cold-blooded animals. -They have moist, scaleless skin. It is often permeable. -Amphibians lay eggs.	Worms -Worms have long, narrow bodies. -Worms do not have limbs (arms and legs). -They are bilaterally symmetrical (both sides the same).
Fish -Fish are cold-blooded animals. -Fish can breathe underwater, using gills. -Fish lay eggs. -Fins help to propel fish through the water.	Spiders -Spiders have eight legs. -Spiders bodies are made of two main parts. -Spiders create silk from their spinneret glands. -Spiders lay eggs.
Birds -Birds are warm-blooded. -Birds have feathers, wings and a beak. -Birds lay eggs.	Insects -Insects have exoskeletons: hard shell-like coverings of their body. They also have three main body parts. -They have antennae on the top of their heads.

National Curriculum Links:

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things.

How does this link to my future learning?

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the life process of reproduction in some plants and animals.

What will I know by the end of this unit:

Flowering Plants

Flowering plants grow flowers. They use pollination in order to reproduce.
 Flowering plants make up about 90% of all species of plant.
 Examples of flowering plants include: Sunflower, Daffodil, Orchid, Orange Tree, Banana Plant

Non-Flowering Plants

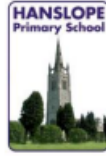
Non-flowering plants do not grow flowers. They rely on seed dispersal in order to reproduce.
 Non-flowering plants make up about 10% of all species of plant.
 Examples of non-flowering plants include: Fern, Moss, Algae, Conifer, Seaweed

Habitat Changes

Animals are often adapted to the habitats that they live in. However, habitats can change over time, which may present animals and plant life with difficulties.
 Some of these changes are natural, e.g:
 The seasons: temperatures rise in the summer and fall in winter. This means that some animals may need to migrate or hibernate.
 Increased or decreased rainfall can also impact on a habitat. Floods and droughts can dramatically impact on environments.

Other habitat changes are man-made, e.g:
 Harvesting fossil fuels, deforestation, dredging rivers, bottom trawling, urbanization, filling in wetlands and mowing fields.
 Global warming is thought to be impacting on many habitats.

Computing



Hanslope Primary School Computing Knowledge Organiser

Year 4: Data Logging

How does this link to my previous learning?

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

National Curriculum Links:

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

How does this link to my future learning?

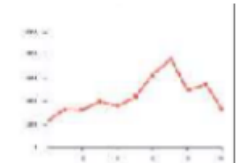
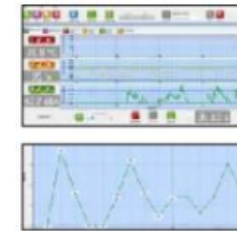
- Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.

What key vocabulary will I learn:

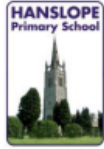
- **Information** - Data put into a context that provides meaning.
- **Data** - Facts and statistics collected for reference or analysis.
- **Collection** - The action or process of collecting someone or something.
- **Sensor** - A device that detects or measures a physical property and records, indicates, or otherwise responds to it.
- **Analysis** - Detailed examination of the elements or structure of something.
- **Data Logger** – An electronic device that automatically monitors and records environmental parameters over time, allowing conditions to be measured, documented, analysed, and validated.
- **Software** - The programs and other operating information used by a computer.
- **Interpret** - Explain the meaning of (information or actions).
- **Conclusion** - A judgment or decision reached by reasoning.

What will I know by the end of this unit:

- To explain that data gathered over time can be used to answer questions.
- To use a digital device to collect data automatically.
- To explain that a data logger collects 'data points' from sensors over time.
- To use data collected over a long duration to find information.
- To identify the data needed to answer questions.
- To use collected data to answer questions.



French



Hanslope Primary School MFL Knowledge Organiser

Year Four – Niveau blanc – Module 4

How does this link to my previous learning?

I previously learnt how to say sentences such as dans le jardin, il y a un escargot. I will revise noun + adjective word order in French. I will learn further fronted adverbials such as dans la mer and dans les bois. I will learn about homophones in French (la mer / la mère).

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 future learning?

I will continue to include conjunctions to create longer, more detailed sentences in both French and Spanish. I will be aware of homophones in English, French and Spanish. I will learn that adjectives must agree with their nouns in terms of gender and quantity, in both French and Spanish.

What key vocabulary will I learn:



What will I know by the end of this unit:

I will be able to:

- learn that a French adjective must agree with the gender of the noun it is describing.
- use a writing frame to create simple sentences using a fronted adverbial, a verb, a range of masculine and feminine nouns and a range of colour adjectives.
- apply the use of a conjunction as necessary.
- understand and use punctuation correctly, e.g. capital letter, comma and full stop

I can join in singing a song such as Une souris verte.

I can recite a rhyme such as Monsieur l'escargot from memory.

I have listened to a story such as Le petit éléphant et les contraires.

History



Hanslope Primary School

Spring 2

History Knowledge Organiser

Year 4: **Would you prefer to live in the Stone Age, Iron Age or Bronze Age?**

How does this link to my previous learning?

- Previous Key stage one learning

National Curriculum Links:

- Changes in Britain from the Stone Age to the Iron Age
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims
- gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history
- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day
- gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'

How does this link to my future learning?

- Why did Romans settle in Britain?

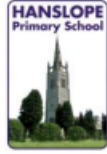
What key vocabulary will I learn:

Skara Brae, Orkney Islands
hearth
settlement
flint
roundhouse
chief
metalwork -copper, bronze, gold, tin
mining
trade (a job requiring manual skills)
arrowheads
import
export
trade (buying and selling goods/services)
exchange
goods
barter

What will I know by the end of this unit:

- To know that history is divided into periods of history e.g. ancient times, middle ages and modern.
- To know that BC means before Christ and is used to show years before the year 0.
- To know that AD means Anno Domini and can be used to show years from the year 1AD.
- To know that prehistory is the period of time before written methods and stretches until the Roman invasion in AD43.
- To know that prehistory is divided into the Paleolithic, Mesolithic, Neolithic, Bronze Age and Iron Age periods.
- To know that the Stone Age, Bronze Age and Iron Age periods are named after the materials that were commonly used to make tools.
- To know that we can use dates to work

Music



Hanslope Primary School Music Knowledge Organiser

Year 4: Body and tuned percussion (Theme: Rainforests)

How does this link to my previous learning?

- This links to previous learning in year 4: Samba and carnival sounds and instruments

What key vocabulary will I learn?

- Body percussion- A style of music where you can use your body to make sounds. You can make many different sounds by clapping, hitting, stamping and tapping.
- Appraising- Assessing and discussing a performance or piece of music.
- Melody- Notes of different pitches played in a sequence to create a tune.
- Rhythm- A pattern of long and short sounds (and silences) within a piece of music.
- Texture- How many layers of sound the music has (thick or thin).
- Layers- The different instruments, rhythms, or melodies that build the overall texture.
- Timbre- The quality of sound, e.g. smooth, scratchy, twinkly.
- Duration- The length of time each note is played for (long or short).
- Structure- How the music is organised into different sections.
- Tempo- The speed of the music (fast or slow).
- Pitch- How high or low the sound is.

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 1: Changes in Pitch, Tempo and Dynamics (Theme: Rivers).

What will I know by the end of this unit:

- Identify the structure of a piece of music.
- Have an idea as to when there is one layer in a piece of music and when there are two.
- Play a sequence in the correct order in time with their partner.
- Have two contrasting rhythms being played together.
- Have two different melodies being played together.
- Have a complete piece of music with four different layers with an appropriate structure.



Hanslope Primary School PSHE Knowledge Organiser – Year 4

Spring 2: Citizenship

How does this link to my previous learning?

In Year 3, children focused on:

- To explore how children's rights help them and other children.
- To consider the responsibilities that adults and children have to maintain children's rights.
- To understand the UN Convention on the Rights of the Child.
- To know that the local council is responsible for looking after the local area.
- To know that elections are held where adults can vote for local councillors.
- To understand the role of charities in the community.

Authority	A person with high status and decision making power.
Cabinet	A group of councillors who have responsibility for different things.
Community	A group of people living in the same area.
Council	A group of people who manage a city, county or organisation.
Councillor Officer	A person who works for the council, not an elected member.
Councillor	A member of a council.
Diversity	Recognising and valuing difference.
Environment	The local surroundings or place a person lives or works in.
Human Rights	Specific rights which belong to every person.
Local Government	The elected party who govern and make decisions for a local area.
Protect	To keep someone safe from something.
Reuse	Use something more than once.
Un/United Nations	An international organisation founded in 1945 after World War 2 which aims to maintain international peace and security, human rights and better standards of living.
Volunteer	A person who offers to help out with tasks or activities without getting paid.

National Curriculum Links:

During key stage 2 pupils learn about themselves as growing and changing individuals with their own experiences and ideas, and as members of their communities.

How does this link to my future learning?

In Year 5, children are learning to:

- Develop an understanding of how parliament and Government work.
- Know what happens when someone breaks the law.
- Know that parliament is made up of the House of Commons, the House of Lords and the Monarch.
- Know that parliament is where MPs debate issues, propose laws, amend existing laws and challenge the government's work.

What will I know by the end of this unit:

- To discuss how we can help to protect human rights.
- To identify the benefits different groups bring to the local community.
- To discuss the positives diversity brings to a community.
- To know that human rights are specific rights that apply to all people.
- To know some of the people who protect our human rights such as police, judges and politicians.
- To know that there are a number of groups which make up the local community.



Hanslope Primary School Religious Education Knowledge Organiser

Year Four- Should believers give things up?

National Curriculum Links:

- To explore Lent and its significance for Christian belief and practice (Believing- Belonging- Behaving- Reflecting and Responding- Making Links)

How does this link to my previous learning?

- Year Four Unit: Is a holy journey necessary for believers?
- Year Three Units: Does taking bread and wine show that someone is a Christian? Is a Jewish child free to choose how to live? Does Easter make sense without Passover?
- Year Two Units: Is Easter important for the church? How should you spend the weekend?
- Year One Unit: Should we celebrate Harvest or Christmas?

How does this link to my future learning?

- Year Five Unit: Was the death of Jesus a worthwhile sacrifice?
- Year Six Unit: Is the resurrection important to Jesus?

What key vocabulary will I learn:

- Christianity**- religion based on the life and teachings of Jesus of Nazareth
- Shrove Tuesday**- traditional feast day before the start of Lent on Ash Wednesday. Traditionally, Christians give up rich foods.
- Ash Wednesday**- the first day in the season of Lent
- Lent**- a period of forty days during which Christians remember the events leading up to and including the death of Jesus Christ, whose life and teachings are the foundation of Christianity.
- Penitence**- the action of feeling or showing sorrow and regret for having done something wrong.
- Giving things up**- to stop doing something
- Carnival**- a festival involving processions, music and dancing

What will I know by the end of this unit:

- That Lent and Advent are seasons in the church year that prepare believers for the feasts of Christmas and Easter
- Ash Wednesday may be celebrated and the significance of the symbolism
- Lent is traditionally a time for giving things up *Fasting is linked to penitence and that it is a way for Christians to put themselves right with God before Easter
- Know about some people who have given things up for what they believe
- Meanings for the temptations and the way Jesus rebuffs them- linking to the practice of Lent
- The story of the temptations Matthew 4:1-11 and Luke 4:1-13.
- The story of the temptations will be linked to the practice of Lent



PE



Hanslope Primary School

Spring 2

PE Knowledge Organiser

Year 4: creative skills and tennis

How does this link to my previous learning?

- Builds upon creative skills learnt in Y3
- Builds upon basic tennis knowledge learnt in Y3

National Curriculum Links:

Use throwing and catching in isolation and in combination and develop and apply control and balance in different ways.

Learn how to use skills in different ways and to link them to make actions and sequences of movement.

Enjoy communicating, collaborating and competing with each other.

Compare their performance with previous ones and demonstrate improvement to achieve their personal best.

How does this link to my future learning?

- Builds to Y5 creative skills
- Build upon tennis skills ready to play more games in Y5

What key vocabulary will I learn:

- Dropfeed
- Backhand
- Forehand
- Control
- Racket
- Target
- Distance
- Strike
- Control
- Accuracy
- Consistency
- Variety

What will I know by the end of this unit:

Creative skills:

- I can send with good accuracy and weight.
- I can get in a good position to receive.
- I can send and receive with fluency/rhythm throughout.
- I can maintain balance throughout.
- I can move smoothly and with control.
- I can coordinate movements with my partner.

Tennis:

- I can move with balance and control to catch a ball
- I can hit/bounce ball on racket when moving
- I can hit ball in forehand position with drop feed
- I can hit a ball in backhand position with a dropfeed
- I can hit a ball into a target from a variety of distances with no bounce