

Year 6 Knowledge
Organisers
Summer 1



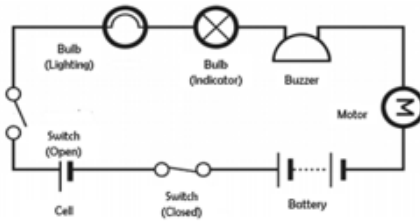
Hanslope Primary School Science Knowledge Organiser

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

What key vocabulary will I learn:



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

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 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 Design Technology Knowledge Organiser

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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 on the right.

-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

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.

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

-Micro-switch, Reed Switch, Light Dependent, Resistors, Push-to-Make Switch, Push-to-Break Switch, Tilt Switch or Toggle Switch:

In designing you should be able to sketch and annotate different ideas, and should also be able to

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 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?

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

National Curriculum Links:

- Sequencing events on a timeline, comparing where it fits in with times studied in previous year groups by using the terms AD and BC in work.
- Describing the links between main events, similarities and changes within and across different periods/studied.
- Asking questions about the interpretations, viewpoints and perspectives held by others.
- Identifying how sources with different perspectives can be used in a historical enquiry.
- Considering a range of factors when discussing the reliability of sources, e.g. audience, purpose, accuracy, the creators of the source.
- Constructing explanations for past events using cause and effect.

How does this link to my future learning?

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

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.



Hanslope Primary School PSHE Knowledge Organiser – Year 6

Summer 1: Economic Wellbeing

How does this link to my previous learning?

In Year 5, children focused on:

- Discussing money risks and management.
- Implementing money safeguarding strategies

National Curriculum Links:

This strand of PSHE isn't a statutory subject in primary schools. This means that there is no set programme of study from the NC, or learning objectives that pupils have to fulfil. This aspect aims to give children the knowledge, skills and understanding to lead confident, healthy and independent lives.

How does this link to my future learning?

In secondary school, children will work towards considering their future career. Economic wellbeing is paramount to their learning journey from Year 6 all the way through their further education and into adulthood.

What key vocabulary will I learn:

- Earnings – the money provided after performing a service eg. through work or investments
- Educational Requirements – what is necessary in order to pursue a career after school and further education
- Expenses – the cost incurred or required for something
- Gambling – play games for a chance to win money – consider the notion of betting
- Responsibilities – having a duty to deal with something or of having control over someone
- Risks – a situation involving exposure to danger
- Safeguard – a measure taken to protect someone or something – consider the links with school
- University – a form of further education – consider other methods too

What will I know by the end of this unit:

- To know that a career route is the path you take to have a particular career and the qualifications and experience you have to gain along the way.
- To identify emotions linked to money.
- To understand how money affects feelings and behaviour.
- To develop responsible attitudes towards gambling and apply this understanding to real-world scenarios.



Hanslope Primary School Computing Knowledge Organiser

Year 6: Creating Media

How does this link to my previous 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:

Modelling - The process of using a computer to make a model of a plan or design.
Three-dimensional - 3D means three-dimensional or having 3 dimensions. For example, a box is a 3D shape, whereas a square is a 2D shape.
Workspace - A grouping of source code files that make up a larger unit, like a web page, website, or program.
Faces - Any of the individual flat surfaces of a solid object
Vertices - A vertex is where two lines or edges meet. Also refers to the corners of 3D shapes.
Handles - A reference to an object or structure that can be stored in a variable.
Duplicate - Exactly like something else, especially through having been copied.
Holes - Sometimes we need to create objects that are not solid -- they have space inside/ within them.

National Curriculum Links:

- 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.

How does this link to my future learning?

- Design, use, and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems.
- Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting, and analysing data

What will I know by the end of this unit:

- To use a computer to create and manipulate three-dimensional (3D) digital objects.
- To compare working digitally with 2D and 3D graphics.
- To construct a digital 3D model of a physical object.
- To identify that physical objects can be broken down into a collection of 3D shapes.
- To design a digital model by combining 3D objects.
- To develop and improve a digital 3D model.



Year 6: physical skills and badminton

- 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 badminton 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:

- Combinations accurately
- Sport specific
- Vertical stance momentum
- Uneven
- Receiving
- Direction position
- Rally
- Hand eye
- Coordination stationary
- Serve stationary
- Possession
- Accuracy

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 softly 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.

Badminton:

- I can explore when different shots are best used.
- I can develop a backhand technique and use it in a game.
- I can practise techniques for all strokes.
- I can understand how to serve in order to start a game.
- I can demonstrate a good awareness of space.



Hanslope Primary School Music Knowledge Organiser

Year 6: Baroque

How does this link to my previous learning?

This links to previous learning on theme and variation (pop art)

What key vocabulary will I learn?

- Opera – A dramatic performance in which a story is told using music and singing.
- Recitative – A section of an opera or oratorio where the sung melody imitates speech.
- Canon – Music in which very similar parts are introduced one by one to overlap.
- Ground bass – A repeating melody in the bass part, usually played by a cello, and most commonly found in Baroque music.
- Fugue – Music in multiple parts where a main theme (subject) and secondary theme (counter subject) appear over and over in different parts and at different pitches.
- Oratorio – A dramatic vocal work on a religious theme, like an opera, but sung without staging.



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?

Links to learning in Secondary school.

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 French Knowledge Organiser

Year 6 Summer 1 Niveau Tricolore

Tu aimes t'habiller comment ?	What do you like to wear?
j'aime porter	I like to wear...
un t-shirt	a tee-shirt
un pull	a jumper
une robe	a dress
une veste	a jacket
un jean	jeans
un pantalon	trousers
un short	shorts
une jupe	a skirt
des chaussures	shoes
	des bottes / boots
	des baskets / trainers
	une casquette / a cap
	un manteau / a coat
	une écharpe / a scarf
	des gants / gloves
	un bonnet / a woolly hat
	des sandales / sandals
	des lunettes de soleil / sunglasses
	un maillot de bain / swimming costume or swimming trunks

Météo-France is the French national meteorological service.



Adverbial phrases	
après l'école	after school
le week-end	at the weekend
quand il y a du soleil	when it's sunny
quand il fait froid	when it's cold

Quel temps fait-il?

<p>il fait chaud</p> <p>it's hot/ warm</p>	<p>il fait froid</p> <p>it's cold</p>	<p>il pleut</p> <p>it's raining</p>
<p>il y a du soleil</p> <p>it's sunny</p>	<p>il neige</p> <p>it's snowing</p>	<p>il y a du vent</p> <p>it's windy</p>



Hanslope Primary School Religious Education Knowledge Organiser

Year Six- Can we know what God is like?

National Curriculum Links:

- To explore different views of God and how some people believe they can know God or know about God and why some do not believe at all (Believing- Belonging- Behaving- Reflecting and Responding- Making Links)

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