

**Year 4
Autumn 1**

Science: States of Matter

Pupils should be taught to:

- 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
- Identify that part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

Geography: Settlements

- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

DT: British inventors

- Who invented the telephone, the World-Wide Web, reinforced concrete work, mackintosh?
- To reflect on the impacts that inventions have had on our lives

Music: Body and tuned percussion

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Computing: The Internet

- Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

**Year 4
Autumn 2**

Science: Sound

- Identify how sounds are made, associating some of them with something vibrating.
- Recognise that vibrations from sounds travel through a medium to the ear
- Find patterns between the pitch of a sound and features of the object that produced it
- Find patterns between the volume of a sound and the strength of the vibration that produced it
- Recognise that sounds get fainter as the distance from the sound source increases

Geography: Spain

Pupils should be taught:

- Human geography, including: types of settlement and land use, economic activity including trade links, distribution of natural resources including energy, food, minerals, water
- Locate the world's countries using maps to focus on Europe, particularly Spain
- Identify key topographical features (including hills, mountains, coasts and rivers) of Spain
- Use maps, atlases globes and computer mapping to locate countries and describe the features studied

DT: American food

- To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- To understand and apply the principles of a healthy and varied diet
- To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Music: Rock and roll

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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 and recorded music drawn from different traditions and from great composers and musicians
- Develop an understanding of the history of music

Computing: Audio editing

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

**Year 4
Spring 1**

Science: Animals including humans

Pupils should be taught to:

- Construct and interpret a variety of food chains identifying producers, predators and prey.
- 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

History: Vikings

Children should be taught about:

- The Vikings and Anglo-Saxon struggles for the Kingdom of England to the time of Edward the Confessor
- Viking raids and invasion
- Resistance by Alfred the Great and Athelstan, first king of England (Battle of Hastings)
- Further Viking invasions and Danegeld
- Anglo Saxon laws and justice
- Edward the Confessor and his death in 1066

Art: Pop art

- To learn about great artists (Who is Andy Warhol and what is the Pop art movement?)
- To improve their mastery of art and design techniques (to use Warhol's blotted line technique to create artwork, recreate Warhol's 'Campbell's soup', portraits of celebrities and self-portraits)

Music: Changes in pitch, dynamics and tempo

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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 and recorded music drawn from different traditions and from great composers and musicians

Computing: Repetition in shapes

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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

**Year 4
Spring 2**

Science: Electricity

- Identify that common appliance 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.

History: The Railway Revolution

- A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- A significant turning point in British history - the first railways

DT: Light up Signs

- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

Music: Haiku music and performance

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Computing: Data logging

- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- 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

**Year 4
Summer 1**

Science: Living things and habitats

- 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

Geography: Egypt and the River Nile

- Locate Egypt using maps, atlases and globes
- Describe and understand the key physical geography of Egypt (Climate, River Nile and delta, Sahara Desert and its water cycle etc.)

History: Egyptians

The achievements of earliest civilizations: Ancient Egypt (e.g. pyramids, irrigation systems, artwork, hieroglyphics, architecture etc.)

Pupils should be taught:

- An overview of where and when the first civilizations appeared
- An in-depth study of Ancient Egypt

Art: Famous buildings

- To improve their mastery of art and design techniques including sculpture with a range of materials (use 'found' materials to create a sculpture)
- To create sketchbooks to record observations

Music: Samba and carnival sounds and instruments

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- Develop an understanding of the history of music

Computing: Photo editing

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
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**Year 4
Summer 2**

Science: Animals including humans

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions

Geography: Coasts

- Name and locate beaches and coast-sides of the United Kingdom
- Geographical regions, and their identifying human and physical features of beaches/coastlines
- Land use patterns and how some of them have changed over time
- Use the 8 points of the compass, 4 and 6 figure grid references, symbols and key, to build their knowledge of the United Kingdom
- Identify human and physical characteristics and key topographical features e.g. mountains, rivers etc. (How does this affect the way in which electricity is produced e.g. the siting of wind, solar, tidal, and fossil fuel power stations?)
- Identify the position and significance of Latitude, Longitude, Equator, Northern Hemisphere, Southern Hemisphere, Arctic and Antarctic Circle

Art: Aboriginal art and the work of Paul Klee

- To create sketchbooks to record their observations and use them to review and revisit ideas (particularly the symbols used in Aboriginal art)
- To improve their mastery of art and design techniques
- To learn about great artists (Paul Klee)

Music: Adapting and transposing motifs

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing 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 and recorded music drawn from different traditions and from great composers and musicians

Computing: Repetition in games

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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