



## Science

### Plants

Pupils should be taught to:

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees

### Plants

Pupils should be taught to:

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

### Everyday materials

Pupils should be taught to:

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties

### Uses of everyday materials

Pupils should be taught to:

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

### Working Scientifically

## Geography

Locational Knowledge

Name and locate the world's continents and oceans.

Name, locate and identify characteristics of the 4 countries and capital cities of the United Kingdom and its surrounding seas.

Where do we live? (Address, postcode, county, British Isles)  
Capital city of England.

Notable landmarks of the countries in the UK.

Place Knowledge

Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a contrasting non-European country.

Human & Physical Geography

Use basic geographical vocabulary to refer to:

- key physical features, including: beach, coast, forest, hill, mountain, ocean, river, soil, valley, vegetation, and weather.

- key human features, including: city, town, village, factory, farm, house, office, and shop. (Vocabulary to describe their environment)

Geographical Skills & Field work

Use simple fieldwork and observational skills to study the geography of their school and the key human and physical features of its surrounding environment.

Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage.

Use simple compass directions (North, South, East and West) and locational language (e.g. near and far) to describe the location of features and routes on a map.

Use aerial photographs and plan perspectives to recognise landmarks and basic physical features; devise a simple map; and use and construct basic symbols in a key. (Digimaps).

## Computing

### Information Technology

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

Log on

Typing skills

Save work

Mouse skills

Word processing with a range of digital content – photos, text, sound (open existing file, edit and save).

Sort, collate, edit and store simple digital content.

[Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating backgrounds) or using pictogram software such as 2Count]

### Digital Literacy

Recognise common uses of information technology beyond school

### Online safety

Modern technology

Information technology beyond school

### Digital Literacy

Recognise common uses of information technology beyond school

Animation

Make links between technology they see around them, coding and multimedia work they do in school.

[Safe Search Kids', 2Publish, animations]

### Digital Literacy

Use technology safely and respectfully, keeping personal information private

### Online safety

Keeping username and passwords safe

### Term three:

### Digital Literacy

Present

Dazzle

Power point

### Digital Literacy

Use technology safely and respectfully, keeping personal information private

### Online safety

Ownership of work, save in private folder

## Design Technology

### Textiles:

**Design:** Design appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, and templates.

**Make:** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting and joining]. Select from and use a wide range of materials including textiles according to their characteristics.

**Evaluate:** Evaluate their ideas and products against design criteria.

e.g. Superhero sock puppets.

e.g. Create your own Elmer.

### Mechanisms (wheels and axles):

**Design:** Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Generate, develop, model and communicate their ideas through talking, drawing, where appropriate information technology e.g. Purple Mash design programme for a vehicle.

**Make:** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping and finishing]. Select from and use a wide range of materials including construction materials according to their characteristics.

**Evaluate:** Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria.

**Technical Knowledge:** Explore and use mechanisms (wheels and axles) in their product.

e.g. Building a vehicle relating to the topic (if applicable) or farming machinery linked to cooking and nutrition.

e.g. Finger skateboard

### Cooking and Nutrition

To understand where food comes from.

Use the principles of a healthy and varied diet to prepare dishes.

e.g. (Farm/Plants) To make a sandwich/wrap

Skills – cutting, spreading

## Music

use their voices expressively and creatively by singing songs and speaking chants and rhymes

play tuned (glockenspiel) and untuned instruments musically

listen with concentration and understanding to a range of high-quality live and recorded music (this is depending on topic? Could focus on a decade each year)

experiment with, create, select and combine sounds using the interrelated dimensions of music – (the elements of music - rhythm, dynamics, tempo, melody, texture timbre (register, range and instrumentation)

feel and keep a steady pulse

to visually represent a sound through drawing

## Art & Design

Drawing (line, shape, form and space)

Experiment with a variety of media;

**Pencils:** Develop a range of tone using a pencil and use a variety of drawing techniques such as: hatching, scribbling and stippling.

**Crayons and felt tips:** Begin control the types of marks made with the range of media. Draw on different surfaces with a range of media and start to record simple media explorations.

**Texture:** Investigate textures by describing, naming, rubbing, copying. Continue to Investigate textures and produce an expanding range of patterns.

**Artists:** Explore the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work. Discuss own work and others work, expressing thoughts and feelings.

Painting (colour and texture)

**Texture:** Experiment with a variety of media; different brush sizes and tools.

Begin to mix colour shades and tones of the same colour.

Create texture using a dry brush or adding surplus water

**Colour:** Explore lightening and darkening paint without the use of black or white.

**Artists:** Explore the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work. Discuss own work and others work, expressing thoughts and feelings.

Sculpture (recycled materials using an artist as a focus)

**Equipment:** Use tools and equipment safely and in the correct way.

**Sculpture:** Shape, form, construct and model from observation and imagination (based on an artist's work in year A).

**Evaluate Throughout.**

## History

### Changes within living memory:

Where appropriate these should be used to reveal aspects of change in national life.

### Significant individuals:

To include the lives of significant people from the past who have contributed to national achievements.

For example: The Queen

A sports person – Muhammed Ali, Tanni Grey Thompson, Sebastian Coe.

Rosa Parks

Nelson Mandela

Baroness Floella Benjamin

### Significant events:

This should include people and places in their own locality.

# Lammack Primary School



## Lower KS2 - Year B Curriculum Overview

### Science

#### Plants

- identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- investigate the way in which water is transported within plants
- explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

#### Animals, including humans

- identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- identify that humans and some other animals have skeletons and muscles for support, protection and movement

#### Living things and their 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

#### 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
- construct and interpret a variety of food chains, identifying producers, predators and prey

#### States of matter

- 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 (°C)
- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

#### Rocks

Pupils should be taught to:

- compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- describe in simple terms how fossils are formed when things that have lived are trapped within rock
- recognise that soils are made from rocks and organic matter

#### Working Scientifically

**Design:** Use research and develop design criteria to inform the design of functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas.

### Geography

#### Locational Knowledge

Where do we live? Locate and name the northern counties in England.

#### Place Knowledge.

Understand geographical similarities and differences through the study of human and physical geography of a region or area of the United Kingdom (comparison of Blackburn to the Lake District), a region or area in a European country (Twinning town in Germany/Poland).

#### Human & Physical Geography

Describe and understand key aspects of:

- physical geography, including: volcanoes and earthquakes.
- human geography, including: settlements, land use, including trade links.

#### Geographical Skills & Field work

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

Use the eight points of a compass, four-figure grid references, symbols and key to build their knowledge of the United Kingdom and the wider world.

### History

- Local History Study: *This could include: a study of an aspect of history or a site from a period beyond 1066 that is significant in the locality [for example, The trial of the Pendle witches]*
- The Viking and Anglo Saxon Struggle for the Kingdom of England to the time of Edward the Confessor: *This could include: Viking raids and invasion, Resistance by Alfred the Great and Althelstan, the first king, Further Viking invasions and Danegeld, Anglo-Saxon laws and justice, Edward the Confessor and his death in 1066*
- Britain's Settlement by Anglo-Saxons and Scots: *This could include: Roman withdrawal from Britain in c CE 410 and the fall of the western Roman Empire Scots invasions from Ireland to north Britain (now Scotland), Anglo-Saxon invasions, settlements and kingdoms: place names and village life Anglo-Saxon art and culture, Christian conversion-Canterbury, Iona and Lindisfarne.*

### D.T

**Make:** Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting], accurately. Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.

**Evaluate:** Analyse a range of existing products. Evaluate their ideas and products against their own design criteria.

### Computing

#### Information Technology

##### Present

Safe search for information to store  
Branching databases  
Databases

Use databases to search  
[2Questions, 2Respond, 2Graph]

#### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.*

#### Online safety

stay safe, conduct using 'safe search kids' using other search engines 'google' safely

#### Digital Literacy

##### Communication

introduce basic computer network hardware (CPU etc)

#### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.*

#### Online safety

e-mail  
password safety  
[2Email]

#### Digital Literacy

##### Create

Paint.net

Photographs – edit (link to evaluating digital content)

#### Digital Literacy

*identify a range of ways to report concern about content and contact.*

#### Online safety

Reporting  
Online gaming  
Online bullying  
Online relationships

**Mechanical Systems (cams):** Technical Knowledge- Understand and use mechanical systems in their products [for example cams]. *e.g. Story telling moving mechanism or mechanical toy*

**Electrical systems:** Technical Knowledge- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs] *e.g. Light up signs or torches*, how key events and individuals in design and technology have helped shape the world ( *Thomas Edison*).

**Cooking and Nutrition (Healthy Breakfast)-** Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, e.g. Healthy muesli or porridge.

### Art and Design

**Drawing** (line, shape, form and space)

**Sketchbook:** Use a sketchbook to record media explorations and experimentations as well as planning and collecting source material for future works.

**Drawing with pencil:** Develop intricate patterns using different grades of pencil and other implements to create texture.

**Tone:** Further develop drawing a range of tones, lines using a pencil. Include in their drawing a range of technique and begin to understand why they best suit.

**Artists:** Discuss and review own and others work, expressing thoughts and feelings, and identify changes and see how they can be developed further. Explore a range of great artists.

#### Evaluate throughout

**Painting** (pattern and texture)

**Generation from different sources:** Start to develop a painting from a drawing. Begin to choose appropriate media to work with.

**Colour:** Use light and dark within painting and show understanding of complementary colours. Mix colour, shades and tones with increasing confidence.

**Artists:** Start to look at working in the style of a selected artist (not copying). Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further. Begin to explore a range of great artists, architects and designers in history.

#### Evaluate throughout

**Sculpture** (clay and wood)

**Equipment:** Use tools and equipment safely and in the correct way.

**Sculpture:** Shape, form, construct and model from observation and imagination

#### Evaluate throughout

### Music

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- to begin to use and understand staff and other musical notations – treble clef, crotchet, quavers, rest.
- develop an understanding of the history of music - 'The Great Composers' (pre 1960 e.g. Classical, Renaissance, Impressionism etc...)
- recognise that the beat within a piece of music is organised into sections called bars.



## Science

### Living things and their habitats

Pupils should be taught to:

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

### Animals, including humans

Pupils should be taught to:

describe the changes as humans develop to old age

### Properties and changes of materials

Pupils should be taught to:

compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets  
know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution  
use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating  
give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic  
demonstrate that dissolving, mixing and changes of state are reversible changes  
explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. Recap the water cycle

### Earth and space

Pupils should be taught to:

describe the movement of the Earth and other planets relative to the sun in the solar system  
describe the movement of the moon relative to the Earth  
describe the sun, Earth and moon as approximately spherical bodies  
use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

### Forces

Pupils should be taught to:

explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object  
identify the effects of air resistance, water resistance and friction, that act between moving surfaces  
recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect

### Working Scientifically

## D.T

### Textiles:

**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. Generate, develop, model and communicate their ideas through discussion, annotated sketches and pattern pieces.

**Make:** Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting and joining], accurately. Select from and use a wider range of materials and components, including textiles, according to their functional properties and aesthetic qualities.

**Evaluate:** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world (Fashion/furnishing designs). *e.g. Funky furnishings, Super cool slippers.*

## Geography

### Locational Knowledge

Locate 10 countries in Europe (France, Spain, Italy, Germany, Poland, Belgium, Sweden, Denmark, Finland, Norway), using maps to focus on Europe and concentrating on environmental regions, key physical and human characteristics, countries, and major cities. Name counties North of Birmingham and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, including key topographical features and land use patterns; and understand how some of these aspects have changed over time. (time and space).

### Human & Physical Geography

Describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains,, and - human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies

### Geographical Skills & Field work

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

## History

- **A Local History study:** How Blackburn has changed over time.
- **A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066:** World War II.
- **Achievement of the earliest civilisations:** Ancient Egypt

## Computing

### Computer Science

*Design, write and debug programs that accomplish specific goals.*

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

Scratch 2

[2Code]

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*

### Online safety

Apps – location services

Online gaming

Online bullying

Online relationships

### Information Technology

*Present data and information*

Safe search

Use of search engines

Credible sources

Non-linear Power point presentation

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*

### Online safety

Current apps in use, acceptable use.

### Information Technology

Email

[2Email]

*Analyse data and information*

Databases

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*

### Online safety

Body image – social perception

Email

[2Response, 2Email]

### Mechanical Systems (pulleys or gears):

**Design:** Use research and develop design criteria to inform the design of functional products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches and computer aided design (*Purple mash design programme*).

**Make:** Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting and joining], accurately. Select from and use a wider range of materials and components according to their functional properties.

**Evaluate:** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

**Technical Knowledge:** Understand and use mechanical systems in their products [for example levers and pulleys].

*e.g. Behead or hang King Charles the 1<sup>st</sup>.*

## Art and Design

**Drawing** (line, shape, form and space)

*Create a detailed drawing*

Develop a key element of their work: line, tone, pattern, texture.

Start to develop their own style using tonal contrast and mixed media.

**Perspective:** Have opportunities to develop further simple perspective in their work using a single focal point and horizon.

**Artists:** (Lowry, John Piper, Egyptia Sculptor) Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further. Identify artists who have worked in a similar way to their own work.

*Evaluate throughout*

**Painting** (colour and texture)

**Colour:** Mix and match colours to create atmosphere and light effects. Mix colour, shades and tones with confidence building on previous knowledge.

**Style:** Start to develop their own style using tonal contrast and mixed media.

**Artists:** Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further. Identify artists who have worked in a similar way to their own work. Explore a range of great artists, architects and designers in history.

*Evaluate throughout*

**Sculpture** (Mod Rock and textiles)

**Equipment:** Use tools and equipment safely and in the correct way.

**Sculpture:** Shape, form, construct and model from observation and imagination

*Evaluate throughout*

## Music

- 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 interrelated dimensions of music - (the elements of music - rhythm, dynamics, tempo, melody, texture timbre (register, range and instrumentation), harmony, form (how the music is organised))
- listen with attention to detail and recall sounds with increasing aural memory (focus on timbre of different sounds – the quality of the sound. For example, is it a metal or wooden instrument playing the same pitch)
- to develop the use and understand staff and other musical notations to support the recording of their compositions ( revision of treble clef, crotchet, quavers, rest)
- graphic score to record composition work.
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians from their focus decade.
- develop an understanding of the history of music – 80s music.

### Cooking and Nutrition

Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.  
*e.g. Juicy, tasty burgers*





## Science

### Living things and their habitats

Pupils should be taught to:

describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals give reasons for classifying plants and animals based on specific characteristics

### Animals including humans

Pupils should be taught to:

identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

describe the ways in which nutrients and water are transported within animals, including humans

### Evolution and inheritance

Pupils should be taught to:

recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

### Light

Pupils should be taught to:

recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

### Electricity

Pupils should be taught to:

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

### Working Scientifically

## Geography

### Locational Knowledge

Locate the world's countries, using maps to focus on North and South America and concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.

Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, including hills, mountains, cities and rivers.

Use maps, atlases, globes and digital/computer mapping locate countries and describe features studied.

### Place Knowledge

Compare a region in UK with a region in N. or S. America with significant differences and similarities.

### Human & Physical Geography

Understand geographical similarities and differences through the study of human and physical geography of a region or area within North or South America.

### Geographical Skills & Field work

Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).

Use the eight points of a compass, four-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.

Use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

## History

**A non-European Society:** *Early Islamic Civilisation, including a study of Baghdad c CE 900, 'The Islamic Golden Age', Its influence on the western world*

**A study of an aspect or theme in British History that extends pupils' chronological knowledge beyond 1066.** *This could include: Changes in leisure and entertainment in the 20<sup>th</sup> century, A significant turning point in British history [The Railways from Victorian times to the present, the Battle of Britain, joining the European Union.]*

**Chronology and the major influence Britain has had on the world eg computing, inventions and significant individuals.** *This could include: Steve Jobs, Mark Zuckerberg, John Logie Baird, Alexander Graham*

## Computing

### Computer Science

*Design, write and debug programs that accomplish specific goals.*

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

### Lego

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.*

### Online safety

Personal privacy  
Mental wellbeing  
Online reputation  
Copyright, Permissions and Ownership

### Digital Literacy

*Present data and information*

Safe search

Prezi

Website design

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.*

### Online safety

Social media apps  
Social perception  
Health well-being and lifestyle  
Managing online information  
Password security – unique.

### Information Technology

**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**

Blogging

[2Blog, display boards]

*Analyse data and information*

Networks

Spreadsheets with formula – Excel

Data logging

### Digital Literacy

*Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour.*

### Online safety

Online gaming  
Chatrooms  
Reporting

## Art and Design

**Drawing** (line, shape, form and space)

### Create a detailed drawing

Develop own style of drawing using tonal contrast and mixed media

Adapt their work according to their views and describe how they might develop it further.

**Composition:** Begin to develop an awareness of composition, scale and proportion in their paintings. Use drawing techniques to work from a variety of sources including observation, photographs and digital images. Develop close observation skills using a variety of view finders.

**Artists:** Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further. Identify artists who have worked in a similar way to their own work.

### Evaluate throughout

**Painting** (pattern and texture)

**Style:** Work in a sustained and independent way to develop their own style of painting. Create work from variety of sources.

**Understanding:** Show an understanding of what works well in their work and why.

**Artists:** Annotate work in sketchbook. Discuss and review own and others work, expressing thoughts and feelings explaining their views. Identify artists who have worked in a similar way to their own work.

### Evaluate throughout

**Sculpture** (electricity and carving)

**Equipment:** Use tools and equipment safely and in the correct way.

**Sculpture:** Shape, form, construct and model from observation and imagination

### Evaluate throughout

## Music

- play and perform in solo and ensemble contexts, using their voices – Year 6 end of year production.
- Played tuned percussion eg. glockenspiels and recorders.
- use and understand staff and other musical notations – understand the treble clef, semibreve, minim, crotchet, quaver, rests, dotted notes, pitch, time signature.
- 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 from their focus decade.
- develop an understanding of the history of music - focus on 60s

## D.T

### Structures (Shell structures including computer aided design):

**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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.

**Make:** Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.

**Evaluate:** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

**Technical Knowledge:** Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

*e.g. Gingerbread houses*

*e.g. Bug Hotel*

### Electrical Systems (Including programming, monitoring and control):

**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. Generate, develop, model and communicate their ideas through discussion and annotated sketches and computer-aided design (*Purple mash design programme*).

**Make:** Select from and use a wider range of tools and equipment to perform practical accurately. Select from and use a wider range of materials and components according to their functional properties.

**Evaluate:** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

Understand how key events and individuals in design and technology have helped shape the world.

**Technical Knowledge:** Understand and use electrical systems in their products [for example, series circuits incorporating switches and buzzers or motors]. Apply their understanding of computing to program, monitor and control their products.

### Cooking and Nutrition

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

*e.g. Delicious Nachos*