

Year Five Curriculum Map

Summer Term

Mathematics

Measurement

Convert between different units of metric measure Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

Calculate and compare the area of rectangles and estimate the area of irregular shapes

Estimate volume

Solve problems involving converting between units of time

Use all four operations to solve problems involving measure using decimal notation, including scaling

Decimals

To add and subtract decimals across 1

Multiply and divide decimals by 10,100 and 1000

Identify numbers in decimal sequences

Properties of shape

Identify 3-D shapes from 2-D representations

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

Draw given angles, and measure them in degrees Identify: angles at a point and one whole turn

Identify: angles at a point on a straight line and $1/2$ a turn (total 180o)

Identify: other multiples of 90o

Use the properties of rectangles to deduce related facts and find missing lengths and angles

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles

Geometry – position and direction

Identify, describe and represent the position of a shape following a reflection or translation

Negative numbers

To count through zero in 1s and multiples

To compare and order negative numbers

Find the difference in negative numbers

Reading

Key text: The Island by Armin Greder

Key text: Hugo Cabret

Key text: The Heart and the Bottle by Oliver Jeffers (read aloud)

Key text: Greenling by Levi Pinfold (read aloud)

Writing

Task: To write a narrative from two perspectives (The Island)

Task: To write a diary in role as Hugo

To write a newspaper article (Hugo Cabret)

RE

Skills

Pupils should be able to:

Christian aid/Islamic relief

Explain beliefs and teachings about justice from Christian and Muslim texts.

Compare their own ideas about justice and fairness with those.

Make connections between belief about justice from sacred texts and the actions of a modern religiously based charity.

Describe examples of the impact of charitable work in the world today.

Raise questions about charity, justice and the impact of religion, suggesting answers.

Explain the importance of the idea that God loves justice and is just to Muslims and Christians.

Gospel

Identify features of Gospel texts (for example, teachings, parable, narrative).

Taking account of the context, suggest meanings of Gospel texts studied.

Make connections between Gospel texts, Jesus' 'good news', and how Christians live.

Relate biblical ideas, teachings or beliefs to the issues, problems and opportunities of their own lives and the life of their own community.

Knowledge

Pupils should know:

Christian aid/Islamic relief

What a charity is and those that already exist.

What charitable work is.

That Christian aid and Islamic relief are charities that help people in poverty.

The importance of charity to those in need.

Gospel

That good news is not just about setting an example for good behaviour: it is that Jesus offers a way to heal the damage done by human sin.

Jesus' good news transforms lives now, but also points towards a transformed life in the future

Jesus' values favour serving the weak and vulnerable.

Christians believe that they should bring this good news to life in the world in different ways (within their church family, in their personal lives, with family, with their neighbours)

Science

Working Scientifically	Knowledge
Pupils should be able to: Forces 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 Animals including humans Describe the changes as humans develop to old age	Pupils should know: Forces That forces can make objects move, speed up or slow down. That objects fall towards the Earth due to the force of gravity. That air resistance affects how different objects fall. The effects of levers, pulleys and simple machines on movement. Animals including humans That all humans and animals go through stages of growth and development – introduce subject specific vocabulary.

History – Groundbreaking Greeks

Skills	Knowledge
Pupils should be able to: Use primary and secondary sources to investigate ancient Greece. Make comparisons between the Minoan and Mycenaean civilisations. Discuss continuity and change in relation to the Dark Age. Explore the components of a city state and the associated key vocabulary (monarchy, tyranny, oligarchy and democracy). Compare social hierarchies in history e.g. ancient Egypt and Shang Dynasty. Describe the achievements and legacy of the key figures in Greek society. Identify the same core values of excellence, respect and friendship between the ancient and modern Olympics.	Pupils should know: Ancient Greece was made up of mainland, surrounding islands and Greek colonies. Ancient Greek history can be divided into seven main periods of civilisations. The Minoan civilisation existed from c3000BC to c1100BC on the island of Crete. The Mycenaean civilisation existed from c1600BC to c1100BC on mainland Greece. After the collapse of the Minoan and Mycenaean civilisations Greece entered a Dark Age. The Classical period, known as the golden age, started in 500BC and ended in 323BC. During the Classical period, ancient Greece was a collection of city states rather than one united country. About the social hierarchy of ancient Greece and how it affected roles in society. About some of the key thinkers, leaders, scientists, mathematicians, historians and writers. That the Olympic Games were invented in ancient Greece. About the achievements of Alexander, the Great.

Geography

Skills

Pupils should be able to:

Identify similarities and differences between the geography of ancient and modern Greece.

Knowledge

Pupils should know:

Ancient Greece was made up of mainland, surrounding islands and Greek colonies.

PE

Skills

Pupils should be able to:

Cricket - To develop throwing accuracy and catching skills.

To develop batting accuracy and directional batting.

To develop catching skills (close/deep catching and wicket keeping).

To develop overarm bowling technique and accuracy.

To develop a variety of fielding techniques and to use them within a game.

To develop long and short barriers and apply them to a game situation.

Athletics

To be able to apply different speeds over varying distances.

To develop fluency and co-ordination when running for speed.

To develop technique in relay changeovers.

To develop technique and co-ordination in the triple jump.

To develop throwing with greater control and technique.

To develop throwing with force for longer distances.

Knowledge

Pupils should know:

Can strike a bowled ball with increasing accuracy

Developing fielding skills and beginning to use these under pressure. Work collaboratively with others.

Use feedback to improve. Understand the need for tactics and when to use them effectively. Understand the rules of the game and play fairly,

Choose best pace for running event. Identify good athletics performance and why it is good.

Perform a range of jumps and show control in take-off and landing. Perform different roles such as coach, timer and official. Show accuracy and power when throwing distance.

Art

Artist: Vincent Van Gogh

Art form: Colour

Skills

Confidently control the types of marks made and experiment with different effects and textures inc. blocking in colour, washes, thickened paint creating textural effects.
Mix and match colours to create atmosphere and light effects.
Use sketchbooks to collect and record visual information from different sources as well as planning, trying out ideas, plan colours and collect source material for future works.
Recognise the art of key artists and begin to place them in key movements or historical events.
Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further.

Knowledge

To know about the life and work of Vincent Van Gogh, in particular his application of paint and use of colour.

DT

Area: Mechanical systems

Brief: Cams

Skills

Pupils should be able to:

Describe in detail the way in which an axle and chassis help a vehicle to move.
Develop measuring, marking, cutting, shaping and joining skills using bench-hooks, clamps...
Use a range of different ways to attach an axle to a chassis, e.g. card triangles, drilled holes, cable ties, clothes pegs.
Identify, describe and evaluate products that contain pulleys and drive belts.
Create pulleys and drive systems that can be driven by a motor or computer.
Design a simple specification to aid their thinking.
Compare the final project to the original design

Knowledge

Pupils should know:

That mechanical systems have an input process and an output.
Understand how cams can be used to produce different types of movements and change the direction of movements.
Know and use technical vocabulary relevant to the project e.g. axle, shaft, rotation.
About engineering and manufacturing companies that are relevant to the product they are designing e.g. car manufacturing.

PSHE, Citizenship, Relationships

Skills	Knowledge
Pupils should be able to: Being My Best Give examples of when I have increased independence and how that links to responsibility Name several qualities that make people attractive that are nothing to do with how they look Growing and changing Explain what resilience is and how it can be developed List ways that I can prepare for changes Identify when I need help and trusted adults in my life who can help me	Pupils should know: Being My Best How to grow in independence and responsibility How to be aware of the media and safety online Growing and Changing How to manage difficult feelings and change How to develop confidence and resilience Where to get help and who they can trust

Music (Charanga)

Title: Dancing in the Street Reflect, Rewind and Replay
Style: Motown Classical
Theme: Motown The history of music, look back and consolidate your learning, learn some of the language of music.
Performance:

Computing

Skills

Pupils should be able to:

Introduction to vector graphics

- To identify that drawing tools can be used to produce different outcomes
- To create a vector drawing by combining shapes
- To use tools to achieve a desired effect
- To recognise that vector drawings consist of layers
- To group objects to make them easier to work with
- To apply what I have learned about vector drawings

Programming B – selection in quizzes

- To explain how selection is used in computer programs
- To relate that a conditional statement connects a condition to an outcome
- To explain how selection directs the flow of a program
- To design and create a program that uses selection
- To evaluate my program

Knowledge

Pupils should know:

Introduction to vector graphics

- To develop an understanding of what a vector drawing is.
- Vector drawings are created by using lines and shapes and that each individual drawing is called an object.
- How to layer, group and duplicate objects.

Programming B – selection in quizzes

- How the If... Then... Else structure can be used to select different outcomes
- To use Scratch to design a quiz in response to a given task and implement it as a program.

French

Skills

Pupils should be able to:

1. (a) Recognise, respond to, and use words for parts of the body.
 (b) Sing a song in French including these new words and phrases.
 (c) Play a game co-operatively in French practising the words.
 (d) Listen to a description of a monster and respond by drawing the correct number of features; label their drawing.
 (e) Use IT to manipulate the new words in written form.
2. (a) Listen to and repeat the new words.
 (b) Recognise the pictorial flash card and respond with the correct word.
 (c) Take part in games and activities to practise the words.
3. (a) Listen to and repeat the question form and the response (Tu aimes le ...? J'aime/Je n'aime pas le ...)
 (b) Both to ask and respond with a partner.
 (c) Indicate responses from several children on a tick/cross list, using all the focus vocabulary, e.g. Tu aimes le rugby? Non, je n'aime pas le rugby.
 Compare results, including similar information if possible, from a partner school.
 (d) Produce longer utterances or statements in French.
4. (a) Listen to instructions in French and respond physically.
 (b) Begin to use French as a natural means of communication in other contexts.

Knowledge

Pupils should know:

1. To recognise and say names for parts of the body in French.
2. To recognise and use correct vocabulary for sports.
3. How to respond to questions about favourite sports.
4. To transfer new concepts and structures to other curriculum areas.