# Year 4 Curriculum Overview



#### **MATHS**

#### Number/Calculation

- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more or less than a given number
- Recognise place value in 4 digit numbers
- Round numbers to the nearest 10, 100 or 1000
- Solve number and practical problems with increasingly large positive numbers
- Read Roman numerals to 100
- Add and subtract numbers up to 4 digits using formal written methods
- Estimate and use inverse operations to check answers
- Recall multiplication and division facts up to 12x12
- Multiply by 0 and 1 and multiply 3 numbers
- Recognise and use factor pairs
- Multiply 2 digit and 3 digit numbers by 1 digit numbers using formal written lavout
- Solve 2 step problems using the 4 operations
- Recognise and show equivalent fractions
- Solve problems using fractions
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents of 1/4, 1/2 and 3/4
- Solve measure and money problems involving fractions and decimals

#### Geometry/Measures

- Compare and classify geometric shapes based on properties and size, including quadrilaterals and triangles
- Identify acute and obtuse angles
- Compare and order angles up to 180 degrees
- Identify lines of symmetry in 2-D shapes in different orientations
- Complete simple symmetric figures with respect to a line of symmetry
- Measure and calculate perimeter of rectilinear figures in cm and m
- Find the area of rectilinear shapes by counting squares
- Estimate, compare and calculate different measures including money
- Describe positions on 2-D grid as co-ordinates in the first quadrant
- Describe movement between positions as translations

- Interpret and present discrete and continuous data using appropriate graphical methods
- Solve comparison, sum and difference problems using information presented on graphs

#### SCIENCE

# **Animals Including Humans**

- Construct and interpret a variety of food chains, identifying producers, predators and prey
- Identify the different types of teeth in humans and their simple functions
- Naming the parts of the digestive system and explaining their functions

#### Electricity

- Identify common appliances which run on electricity
- Construct a simple series electrical circuit, identifying and naming its basic parts
- Identify if a lamp will light in a simple series circuit
- Recognise that a switch opens and closes a circuit
- Recognise common conductors and insulators and associate metals with being good conductors

# **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

#### Sound

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

#### States Of Matter

- Compare and group materials together according to whether they are solids, liquids or gases
- Observe that some materials change state when heated or cooled, measuring the temperature in which this happens
- Identify the part played by evaporation and condensation in the water cycle

#### MODERN FOREIGN LANGUAGES

- Listen and engage with spoken language and respond appropriately
- Ask and answer questions
- Speak in sentences using familiar vocabulary
- Develop appropriate pronunciation and intonation
- Show understanding of words and phrases and simple writing
- Appreciate stories, songs, poems and rhymes
- Broaden vocabulary

#### Topics:

- All about me/friends
- My school -days, teacher, classroom objects, rooms in the school
- My local area- shops, shopping,
- Human body-parts of the body/following instructions
- Feeling well, unwell, explain feelings
- More about me-family, pets

# COMPUTING

# We Built This City- Minecraft

- Design, write and debug programs to create their own 3D world that sets specific goals, including controlling or simulating physical systems by solving problems by decomposing them into smaller parts
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs input and output
- Use technology safely, respectfully and responsibly: recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# **Making Games- Scratch**

- Design, write and debug programs that will create a computer game using Scratch. 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 and combine a variety of software

### We've got the Power-Storyboard

- 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 to use social media as a force of good to create a storyboard for a film
- Use technology safely, respectfully and responsibly: recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact



		RELIGIOUS STUDIES Judaism, Christianity and Islam  Judaism/Islam- exploring different traditions and how communities practise their faith  Identify rules and responsibilities in society which they consider to be important  Know the sacred space for a Christian is a church and for a
		<ul> <li>Muslim is a mosque and for a Jew is a synagogue</li> <li>Investigate the global significance of religious signs and symbols</li> <li>Simple overview of the foundations and beliefs of Buddhists</li> <li>Describe how Muslims are guided by the 5 Pillars of Islam</li> <li>Christmas- describe how light is used as a symbol at Christmas</li> <li>Easter – explore the events during Holy week from art works</li> </ul>
ENGLISH Reading Apply growing knowledge of root words, homophones, prefixes and suffixes to read aloud and understand meaning Read further exception words, noting unusual correspondence between spelling and sound Listen to and discuss a wide range of fiction, poetry, plays, nonfiction and reference books Increase familiarity with a wide range of books, retell some orally Identify themes and conventions in a wide range of books Prepare poems and playscripts to perform Discuss words and phrases which capture the reader's interest and imagination Recognise different forms of poetry Draw inferences from characters' feelings, thoughts and motives from their actions and justify with evidence Predict what might happen from details stated and implied Identify main ideas and summarise Identify how language, structure and presentation contribute to meaning Writing Retrieve and record information from non-fiction Write from memory dictated sentences with correct punctuation Use diagonal and horizontal strokes to join letters Organise paragraphs around a theme Create settings, characters and plot in narratives Use simple organisational devices in non-fiction Assess the effectiveness of their own and others writing Propose changes to grammar and vocabulary to improve consistency Place the possessive apostrophe accurately in regular and irregular plurals Use the first two or three letters in a word to check the spelling using a dictionary Discuss and record ideas Compose and rehearse sentences orally	MUSIC Sing in tune with confidence using a wider vocal range Identify and respond to musical phrases and play them by ear Identify and recall rhythmic and melodic patterns in a variety of music Explore/select different types of accompaniment for different moods and follow own musical notation Listen and respond to music from different eras Create textures of sounds for song accompaniment Opportunities to play percussion instruments  WOW: Whole school musical experiences- Presto  PSHE Relationships- Growing up Talk about their own family and the relationships within it Name the main male and female body parts for reproduction Describe some feelings young people might experience as they grow up  Relationships-VIPs Discuss the impact of our attitudes affect us when trying to make new friendships Discuss ideas to help someone who is being bullied  Health and wellbeing- Think positive Talk about things that make them happy and calm Identify uncomfortable emotions and what can cause them  Health and wellbeing-safety first Identify and discuss some school rules for staying safe and healthy Identify who they should tell if they see something online that worries, upsets or confuses them  Living in the wider world- respecting rights Know what human rights are Know what human rights are Explain what respect means and understand how they can respect the rights of others	<ul> <li>Use running, jumping, catching and throwing in isolation and in combination</li> <li>Play competitive games, modified where appropriate, and applying attacking and defending principles</li> <li>Develop strength, flexibility, technique, balance and control in gym, dance and athletics</li> <li>Compare performances with previous ones and demonstrate improvement</li> <li>Swim competently, confidently and proficiently over at least 25 meters</li> <li>Perform safe self-rescue in different water based situations</li> <li>WOW- Warrington Wolves rugby and local schools skills day</li> </ul>

# Year 4 Curriculum Overview

- Use simple organisational devices according to genre
- Proof read any written work for errors

#### Grammar

- Extend range of sentences used with more than one clause and wider range of conjunctions
- Use perfect tense
- Use range of nouns & pronouns to achieve cohesion and avoid
- Use conjunctions, adverbs and prepositions to express time and cause
- Use fronted adverbials

# Speaking & Listening

- Speak audibly and fluently with increasing use of Standard English
- Participate in discussions, presentations and performance

#### DESIGN AND TECHNOLOGY

# **Electrical Systems- Simple circuits and switches** Designing

• Generate, develop, model and communicate realistic ideas through discussion and as appropriate, annotated sketches, cross-sectional and exploded diagrams

# Making/Evaluating

- Order the main stages of making
- Select from and use tools and equipment to cut, shape, join and finish with some accuracy
- Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic
- Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work

# Food- Healthy and varied diet Designing

 Generate and clarify ideas through discussion to develop design criteria including appearance, taste and texture

# Making/Evaluating

- Plan/select the main stages of a recipe, listing ingredients, utensils and equipment
- Evaluate the ongoing work and the final product with reference to the design criteria

# Mechanical Systems- Levers and linkage Designing

- Generating realistic ideas and their own design criteria through discussion, focusing on the needs of the user
- Use annotated sketches and prototypes to develop, model and communicate ideas

### Making/Evaluating

- Order the main stages of making
- Select from and use appropriate tools with some accuracy to cut, shape and join paper and card
- Evaluate their own products and ideas against criteria and user needs, as they design and make

#### **ART AND DESIGN**

- Use sketchbooks to collect and record visual information from different sources. Review and adapt work
- Drawing: Draw for a sustained period of time. Use different grades of pencil. Begin to show an awareness of objects having a third dimension
- Painting: Experiment with different effects and textures. Mix primary colours to make secondary colours. Mix and use tints and shades
- Collage: Experiment with a range of collage techniques such as tearing, overlapping and layering to create images and represent textures
- Clay modelling linked to Roman soldiers

# **GEOGRAPHY**

Identify and describe physical features including land use of a local area

#### Place knowledge

- Understand geographical similarities and differences through the study of an area in the UK and
- Study contrasting areas of the UK (urban and coastal)

### **Human and Physical Geography**

- Describe and understand land use patterns and how these have changed over time
- Identify rivers and how the water cycle works

#### Geographical Skills and Field work

- Use maps, atlases, globes and digital mapping to locate places and features and describe the identified features
- Learn the 8 points of a compass and 2 figure grid references, basic OS symbols and keys to build their knowledge of the

**HISTORY** 

- **Key Skills**  Continue to develop a chronologically secure knowledge of British, local and world history
- Note connections, contrasts and trends over time, developing use of historical terms
- Raise historically valid questions
- Select and organise relevant historical information

- The achievements of the earliest civilisations- Ancient Romans
- A study of World War II, focussing on the impact on the lives of children (evacuation)
- Understand that knowledge of the past is constructed from a range of sources
- Local study of the history of Warrington

### WOW - Roman Experience at Chester 'Life as an evacuee' at Tatton Park

# **Year 4 Curriculum Overview**



World War Two Street Party	Use field work and observational skills to study an area of the UK