

Year 4 Alderman Jacobs School Key Stage 2

### Writing

#### Narrative

Write stories that contain mythical, legendary or historical characters or events.

Write stories of adventure.

Write stories of mystery and suspense.

Write letters.

Write stories, letters, scripts and fictional biographies inspired by reading across the curriculum.

## Non-fiction

Write instructions.

Write recounts.

Write persuasively.

Write explanations.

Write non-chronological reports.

Write in a journalistic style.

Write arguments.

Write formally.

## Poetry

Learn by heart and perform a significant poem.

Write poems that convey an image (simile, word play, rhyme and metaphor).

## Reading

Read and listen to a wide range of styles of text, including fairy stories, myths and legends.

Listen to and discuss a wide range of texts.

Learn poetry by heart.

Increase familiarity with a wide range of books, including myths and legends, traditional stories, modern fiction, classic British fiction and books from otherâ€" cultures.

Take part in conversations about books.

Use the school and community libraries.

Read and listen to whole books.

# Communication

Engage in meaningful discussions in all areas of the curriculum.

Listen to and learn a wide range of subject specific vocabulary.

Through reading identify vocabulary that enriches and enlivens stories.

Speak to small and larger audiences at frequent intervals.

Practise and rehearse sentences and stories, gaining feedback on the overall effect and the use of standard English.

Listen to and tell stories often so as to internalise the structure.

Debate issues and formulate well-constructed points.

#### Mathematics

Count and calculate in increasingly complex contexts, including those that cannot be experienced first hand.

Rigorously apply mathematical knowledge across the curriculum, in particular in science, technology and computing.

Deepen conceptual understanding of mathematics by frequent repetition and extension of key concepts in a range of engaging and purposeful contexts.

Explore numbers and place value so as to read and understand the value of all numbers.

Add and subtract using efficient mental and formal written methods.

Multiply and divide using efficient mental and formal written methods.

Use the properties of shapes and angles in increasingly complex and practical contexts, including in construction and engineering contexts.

Describe position, direction and movement in increasingly precise ways.

Use and apply measures to increasingly complex contexts.

Gather, organise and interrogate data.

## Science

## Biology

# Animals and humans

Look at the digestive system in humans.

Look at teeth.

# Evolution and inheritance

Look at adaptation to environments.

# All living things

Identify and name plants and animals'

Look at classification keys.

Look at classification of plants, animals and micro organisms.

Look at the effect of diet, exercise and drugs.

### Chemistry

## States of matter

Look at solids, liquids and gases, changes of state, evaporation, condensation and the water cycle.

## **Physics**

### Sound

Look at sources, vibration, volume and pitch

## Working Scientifically

Across all year groups scientific knowledge and skills should be learned by working scientifically. (This is documented in the Essentials for progress section.)

### **Physics**

## Electricity

Look at appliances, circuits, lamps, switches, insulators and conductors.

Look at circuits, the effect of the voltage in cells and the resistance and conductivity of materials.

# Art & Design

Use experiences, other subjects across the curriculum and ideas as inspiration for artwork.

Develop and share ideas in a sketchbook and in finished products.

Improve mastery of techniques.

Learn about the great artists, architects and designers in history.

## Computing

Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Use sequence, selections and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.

Use logical reasoning to explain how a simple algorithm works, detect and correct errors in algorithms and programs.

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.

Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.



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Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

### Design & Technology

## 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, prototypes, pattern pieces and computer-aided design.

### Make

Select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately.

Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, 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

# Technical knowledge

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.

# 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.

### Geography

Locate the world's countries, with a focus on Europe and countries of particular interest to pupils.

Identify key geographical features of the countries of the United Kingdom, and show anunderstanding of how some of these aspects have changed over time.

Locate the geographic zones of the world.

Understand the significance of the geographic zones of the world.

Understand geographical similarities and differences through the study of human and physical geography of a region or area of the United Kingdom (different from that taught at Key Stage 1).

Understand geographical similarities and differences through the study of human and physical geography of a region or area in a European country.

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

Describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers,

mountains,  $\,$  volcanoes and earthquakes and the water cycle

- human geography, including: settlements, land use, economic activity including trade

links and the distribution of natural resources including energy, food, minerals and water supplies.

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 keys (including the use of Ordnance Survey maps) to build knowledge of the United Kingdom and the world

Use a wide range of geographical sources in order to investigate places and patterns.

## History

The Roman Empire and its Impact on Britain.

A study of a theme in British history.

Early Civilizations achievements and an in-depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty.

History of interest to pupils.

### Language

In the chosen modern language:

- Speak
- Read
- Write.

Look at the culture of the countries where the language is spoken.

#### Musi

Play and perform in solo and ensemble contexts, using voice and playing instruments with increasing accuracy, control and expression.

Improvise and compose music using the inter-related dimensions of music separately and in combination.

Listen with attention to detail and recall sounds with increasing aural memory.

Use and understand the basics of the stave and other musical notations.

Appreciate and understand a wide range of high-quality live and recorded music from different traditions and from great musicians and composers.

Develop an understanding of the history of music.

# Personal Development

Discuss and learn techniques to improve in the eight areas of 'success'.

Study role models who have achieved success.

Study those who have lost success and relate this to the eight areas of 'success'.

# Physical Education

Play competitive games, modified where appropriate, such as football, netball, rounders, cricket, hockey, basketball, badminton and tennis and apply basic principles suitable for attacking and defending.

Take part in gymnastics activities.

Take part in athletics activities.

Perform dances.

Take part in outdoor and adventurous activity challenges both individually and within a team.

Swimming and water safety: take swimming instruction either in Key Stage 1 or Key Stage 2.

# Religious Education

Study the beliefs, festivals and celebrations of Christianity.



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Study at least two other religions in depth. Choose from Buddhism, Hinduism, Islam, Judaism or Sikhism.

Study three of the major six religions not studied in depth in order to gain a brief outline.

Study other religions of interest to pupils.

Additional Content