

The

Lloyd Williamson

Schools

Curriculum Topics
and
Programmes of Study

Minotaurs

2020-2021

English

Pupils will be taught to read a wide range of poetry and books written at an age appropriate interest level with accuracy and at a reasonable speaking pace. They will be supported to read accurately with meaning and clear, appropriate intonation, which demonstrates understanding. Pupils will be taught to organise and write their ideas quickly and legibly. They will be taught to use correct and appropriate punctuation and grammar. They will be supported to use correct spelling throughout their work across the curriculum.

Pupils will be taught and encouraged to enjoy language. They will be encouraged to extend their use of language and broaden their vocabulary and styles through incorporating what they learn through a broad diet of literature.

All pupils will be taught to enhance the effectiveness of their writing as well as their competence.

The pupils' writing should be sufficiently fluent and effortless for them to manage the general demands of the overall curriculum. The pupils will be taught to consciously control sentence structure in their writing and understand why sentences are constructed as they are.

Texts (for study and comprehension)

- Stories with clear structures: with particular focus on beginning, middle and end
- Play scripts: with particular focus on conventions (format, stage directions and asides)
- Story beginnings
- News reports: with particular focus on specific features of, fact and opinion
- Instructional texts
- Poetry: with particular focus on Narrative poems
- Stories from ancient cultures
- Persuasive/Informative writing
- Letters: with particular focus on letters to persuade and argue

Writing focus

- Story structure: with particular focus on beginning, middle and end, and story beginnings (description of the main character, description of the setting, speech to break up the narrative and an introduction to the main even/key incident of the story)
- Paragraphs
- Play scripts
- Instructions
- News reports
- Description of character/characterisation
- Writing from a point of view
- Communicating information
- Poetry
- Writing an argument – using persuasive language
- Book Reviews/reviews of shows and trips
- Note-taking

- Advertisements

Use of Language and Grammar

- Revision of all basic parts of speech and their use in sentences
- Dialogue: understanding of, and correct presentation of, in written work
- Person and tenses of verbs
- Imperatives and tenses of verbs
- Making complex sentences: extension of simple sentences with conjunctions and description
- Direct/Reported speech
- Agreement: noun and verb
- Agreement: tense and subject
- Categories of nouns
- Summarising sentences
- Ambiguity and subtleties
- Apostrophes
- Phrases vs. sentences: appropriate use of
- Clauses
- Prepositions
- Time-connectives
- Synonyms
- Homophones
- Antonyms
- Alphabetical order
- Complex abbreviations: e.g./i.e./R.S.V.P./via/viz, etc
- Double negatives
- Idioms
- Proverbs
- Prepositions

Range of texts (for pupils to read for themselves)

- Novels
- Playscripts
- Poems
- Instructions
- Short stories
- Legends: with particular focus on Greek legends
- News reports
- Ancient mythology
- Narrative poetry
- Folk tales
- Stories from different cultures
- Persuasive writing
- Choral poetry
- Advertisements

Mathematics

The children will be encouraged and supported to develop confidence and mental fluency with numbers. We will cover the following:

Number

- Place value up to millions
- Number problems using the four rules up to millions
- Decimals as fractions
- Ordering decimals
- Four rules of number work pertaining to decimals
- Rounding numbers: using whole numbers and decimals
- Using calculators
- Converting decimals to fractions
- Converting fractions to decimals
- Comparing fractions
- Percentages: simple and complex
- Converting percentages into fractions and decimals
- Converting fractions into percentages
- Mathematical terminology
- Long multiplication
- Revision of square numbers
- Cube numbers
- Algebra as missing numbers/values $2x = 10$ $x = 5$
- Mental arithmetic skills using the four rules of number
- Mental Arithmetic (Schofield and Sims – expectation of being on book 3/4)

Shape and Space

- Properties of 2D shapes: square, rectangle, rhombus, trapezium, parallelogram and kite
- Triangles: equilateral, isosceles, right-angled and scalene
- Polygons: regular and irregular
- Perimeter
- Area of 3 and regular 4 sided shapes
- Circles: diameter and radius
- Congruence
- Line symmetry
- Rotational symmetry
- Plane symmetry
- Volume

Handling Data

- Averages: mean, median, mode and range
- Pie diagrams
- Distance tables
- Probability
- Interpretation of graphs
- Plotting line graphs

Measurement

Revision of previous knowledge and understanding

Angles: right, acute, obtuse, reflex

Measuring angles using a protractor

Angles on a straight line

Analogue and digital time problems using single minutes e.g 4.37 – 5.05: how many minutes

Timetables: reading and problems

Reading a variety of scales between whole numbers

Map references

Constructing triangles using a compass and protractor

Science

Pupils will be taught to use the following practical scientific methods, processes and skills:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements using a range of scientific equipment with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results with increasing complexity using scientific diagrams and labels, classification keys, tables, scatter, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms in the form of presentations and displays
- Identifying scientific evidence that has been used to support or refute ideas and/or arguments

Pupils will be taught to:

Living things and their habitats (Biology)

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life processes of reproduction in some plants and animals

Animals including humans (Biology)

- Describe the changes as humans develop to old age – pupils will draw a timeline to indicate stages in growth and development
- Puberty

Properties and changes of materials (Physics and Chemistry)

- 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 bicarbonate of soda

Earth and Space (Physics)

- Describe the movement of Earth and other planets relative to the sun and 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 (Physics)

- 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

History

Pupils will continue to develop a chronologically secure knowledge and understanding of British, local and world history. They will note connections, contrasts and trends over time and develop appropriate use of historical terms. History will be taught in relation to its impact on us today – with reference to current local and world events).

Topics will include but not be limited to:

- The Georgians, slavery and America / Africa
- The Victorians
- The Battle of Britain

Geography

The children will be taught, with reference to current politics and world events, to:

Locational and place knowledge

- Locate the world's countries, using maps to focus on North and South America concentrating on capitals and the main physical and human characteristics
- British and world rivers and coasts, concentrating on the formations of both

Human and Physical Geography

- Natural disasters
- Local traffic

Geographical skills and fieldwork

- Using eight points of the compass, six point grid references, symbols and keys – outdoor location work (following maps)
- Use fieldwork to observe, measure, record and present human and physical features of the local area: specifically the development of London as an international city of commerce and finance

Religious Education

The main religion of study will be Islam.

Topics will include but not limited to:

- The development of Islam
- Key stories and the development of the Quran
- Mosques
- Key celebrations

The pupils will learn through first hand experience where possible – visits from guest speakers and visits to specific places of worship.

Pupils will continue to develop an understanding of the importance of creating a community that works in harmony. This will include an exploration of:

- Forgiveness
- Fairness
- Love/friendship
- Empathy/compassion
- Respect/tolerance
- Awe and wonder
- Right and wrong
- Respect and value for the views and opinions of other faiths
- Respect for the right of others to hold their own religious views without ridicule or embarrassment
- Recognition that everybody is unique and has something to offer
- Appreciation for the impact that beliefs, values and traditions have on lifestyle

Art and Design

Pupils will be taught to develop their techniques, including their control and use of materials. They will explore and practise their creativity through experimentation and an increasing awareness of different kinds of art, craft and design.

The pupils will:

- create sketch books to record their observations and use them to review and revisit ideas
- improve their mastery of art and design techniques including drawing, painting and sculpture with a range of materials
- know about great artists, architects and designers in history.

Topics will include:

- Objects and meanings
- Photography
- Textiles

The pupils will study an artist who works with textiles as well as a photographer

Art History: Eastern Art

Computing

Pupils will be taught to:

- design and write programs that accomplish specific goals, including controlling or simulating physical systems, solve problems by decoding them into smaller parts
- use sequence, selection and repetition in programs, work with variables and various forms of input and output, generate appropriate inputs and predicted outputs to test programmes
- use logical reasoning explore how a simple algorithm works and to detect and correct errors in algorithms and programmes
- understand computer networks including the internet, how they can provide multiple services 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, safely and securely
- select, use and combine a variety of software on a range of digital devices (including iPads)

Topics will include but not be limited to:

Appropriate Key Stage 2 games

Use of apps / games on the iPads

Digital camera project – printed up or made into a digital art book

Use of emails as communications

Public profiles – safe internet use

Saving information in various forms (inc. cloud)

Simple algorithm games using packs of cards and yes/no boards

Use of Scratch (free resource to download)

Compare and contrast various search engines (specific and safe subjects)

Drawing

Design and Technology

When designing and making, pupils will be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose and 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
- select from and use a wider range of materials and components

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria, considering the views of others for improvement
- understand how key events and technology have helped shape the world

Technical knowledge

- apply their knowledge of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products
- understand and use electrical systems in their products
- apply their understanding of computing to programme, monitor and control their products

Topics will include:

- Musical instruments
- Bread and biscuits – packaging and advertising
- Moving toys

Cooking and Nutrition

Pupils will be taught to:

- 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

Music

Pupils will be taught to:

- Play and perform in solo and group contexts using their voices and musical instruments with increasing accuracy, fluency, control and expression
- Improvise and compose music for a range of purposes
- 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 from different traditions, composers and musicians
- Develop an understanding of the history of music

Pupils will experience live music on a regular basis – plan for and look out for free London concerts experiences.

Languages

The children will be taught French and Latin and be given the opportunity to learn another language of their choice from a range offered.

We will teach the pupils to:

- Understand and respond to spoken and written language from a variety of authentic sources
- Speak with increasing confidence, fluency and spontaneity, finding ways to communicate what they want to say, including through discussion and asking questions, improving the accuracy of their pronunciation and intonation
- Write at varying length, for different purposes and audiences, using the variety of grammatical structures they have learnt
- Discover and develop an appreciation of a range of writing in the language studied.

Logic and Reasoning

The children will be taught to develop and extend their memory as well as become good at solving logic problems and puzzles. We will encourage and support them to acquire the essential skills and strategies and understand how and when to use them.

When solving logic problems and puzzles, the following strategies will be taught:

- Identifying carefully what is known and what needs to be found and thinking about how they might relate
- Looking through the information that is given for any relationships or patterns that can be developed and used
- Developing a line of thinking that involves making inferences and deductions, for example ‘if I know that then this could or must be true’, and testing these out against the given information
- Taking one piece of the information and changing it, while keeping everything else fixed, to see what effect it has on the problem
- Choosing a way of recording and organising the given information that helps to see how the problem is structured
- Checking answers along the way to see if they satisfy the conditions or rules

Physical Education

Pupils will be taught to:

- Use running, jumping, throwing and catching in isolation and combination
- Play competitive games, modified where appropriate, e.g. bat and ball, basketball, cricket, football, hockey, netball, rounders and tennis and apply the basic principles of attack and defence
- Develop flexibility, strength, technique, control and balance e.g. through athletics and gymnastics
- Perform dances using a range of movements patterns
- Take part in outdoor and adventurous activity challenges (e.g. PGL) and wide games
- Compare their performances with previous ones and demonstrate improvement and personal best