



Ancient Greece 2023/24 (Spring term)

Synopsis:

Learning Sequence:

Teach Computing; Programming A (Variables in Games), Data and Information (Introduction to Spreadsheets)

- Lesson 1 Introducing variables
- Lesson 2 Variables in programming
- Lesson 3 Improving a game
- Lesson 4 Designing a game
- Lesson 5 Design to code
- Lesson 6 Improving and sharing
- Lesson 1 Collecting Data
- Lesson 2 Formatting a spreadsheet
- Lesson 3 What's the formula?
- Lesson 4 Calculate and duplicate
- Lesson 5 Event planning
- Lesson 6 Presenting data

Science

Learning Sequence:

See White Rose planning <https://whiteroseeducation.com/resources?year=year-6-science&subject=science> (plus 'renewable energy' block from Autumn term)

Make Observations	Independently decide which observations to make
Perform Tests	Recognise and control variables where necessary Explain which variables need to be controlled and why
Ask Questions	Plan different types of scientific enquiry in order to answer questions
Gather Data	Decide how to record data/results of increasing complexity using diagrams, classification keys, tables, scatter graphs, bar and line graphs Report and present findings from enquiries, examining causal relationships and reliability of results
Analyse Data	Use test results to make predictions to set up further tests (comparative/fair) and explain reasoning
Use Equipment	Take measurements using a range of scientific equipment with accuracy and precision, taking repeat readings where appropriate

Animals Including Humans	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
Light	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
Writing	
Learning Sequence: Classic plays: Shakespeare Greek myths	
Language & Vocabulary	Use knowledge of language from stories, plays and poetry to enhance the effectiveness of their writing Become familiar with the language of writing eg figurative language, imagery, style and effect Use dictionaries (and thesauruses) to check meaning of new words/language Select appropriate language and vocabulary to reflect their understanding of audience and purpose Develop characters, settings and atmosphere using language and vocabulary from reading/books Integrate dialogue to advance action and convey character
Plan, Draft, Edit & Evaluate	Use dictionaries to check the spelling and meaning of words Identify audience and purpose when writing Note and develop initial ideas drawing on reading Assess effectiveness of own and others' writing Propose changes to grammar, punctuation and vocabulary to enhance meaning/effectiveness Proof-read for spelling and punctuation errors
Grammar & Punctuation	Use verb tenses consistently and correctly throughout their writing Use the semi-colon, colon and dash when writing lists or as the boundary between independent clauses Use wider range of cohesive devices (repetition of word/phrase, adverbials and ellipsis)
Text Structure & Features	Use knowledge of language and structure gained from stories, plays, poetry and non-fiction in their writing Reflect understanding of audience and purpose through choice of grammar, vocabulary and structure Be exposed to wide range of books including myths, legends, fairy stories, modern fiction, fiction from literary heritage and books from other cultures In fiction, consider how authors develop character and setting Evaluate how authors use language and consider effect on the reader

Maths

Learning Sequence:

See White Rose planning

<https://whiteroseeducation.com/resources?year=year-6-new&subject=maths> (plus 'converting units' unit from autumn term)

Fractions

solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts

solve problems involving similar shapes where the scale factor is known or can be found

solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places

multiply one - digit numbers with up to 2 decimal places by whole numbers

use written division methods in cases where the answer has up to 2 decimal places

associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]

recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Measurement

solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate

use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places

convert between miles and kilometres

recognise that shapes with the same areas can have different perimeters and vice versa

recognise when it is possible to use formulae for area and volume of shapes

calculate the area of parallelograms and triangles

calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]

Statistics

interpret and construct pie charts and line graphs and use these to solve problems

calculate and interpret the mean as an average

Algebra

use simple formulae

generate and describe linear number sequences

express missing number problems algebraically

- find pairs of numbers that satisfy an equation with 2 unknowns

enumerate possibilities of combinations of 2 variables