# Westfield School Junior House Curriculum Information for Year 6 Autumn Term 2024

## **Mathematics**

## We will cover the following objectives:



#### Place value:

- Round and order numbers up to 10 million
- Round numbers to 10,100 and 1000
- Negative numbers
- Powers of 10

## Calculations involving addition, subtraction, multiplication and division:

- Addition and subtraction of whole numbers up to 5 digits
- Use of inverse operations to solve addition and subtraction problems
- Multiply 4-digit numbers by 2-digit numbers
- Long division
- Factors
- Common factors and common multiples
- Prime numbers
- Square and cubed numbers
- Order of operations (BIDMAS)

#### **Fractions:**

- Equivalent fractions
- Simplifying fractions
- Converting improper fractions to mixed numbers and vice versa
- Addition, subtraction, multiplication and division of fractions
- Finding fractions of an amount

## **Measurements:**

- conversion of metric measurements
- metric to imperial conversions

Problem solving and reasoning activities will be taught throughout the term.

There will be a mini assessment after each unit of study.

## **English**



Our **fiction** unit this term will start with a study of the novels of Philip Pullman. We will read Clockwork, Spring heeled Jack, Count Karlstein and the beginning of Northern Lights. After half term we will focus on adventure stories using the text 'Holes' by Louis Sacher. We will cover the following objectives:

## Comprehension

To discuss how authors use language, including figurative language.

To draw inferences such as inferring characters' feelings, thoughts and motives from their actions.

To summarise the main ideas of a text.

To predict what might happen.

To participate in discussions about books, building on ideas and challenging views courteously.

## Composition

To identify the purpose of the writing, selecting the appropriate form and using other similar writing as models for their own.

To note and develop initial ideas, drawing on reading and research where necessary.

When writing narratives, to consider how authors have developed characters and settings.

To select appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning.

In narratives, to describe settings, characters and atmosphere and integrate dialogue to convey character and advance the action.

To assess the effectiveness of their own and others' writing.

To propose changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning.

To proof-read for spelling and punctuation errors.

#### Grammar

To study different types of sentence construction and identify clauses.

To identify and use expanded noun phrases and conjunctions.

To use commas to clarify meaning.

To use semi-colons and colons to mark boundaries between independent clauses.

To understand the subjective form of verbs.

#### Spoken language

To articulate and justify answers and opinions.

To develop understanding by speculating, imagining and exploring ideas.

To consider different viewpoints.

To listen respectfully to the contributions of others.

#### Vocabulary

To increase knowledge of root words, prefixes and suffixes and to understand the meaning of new words that are met.

Our **non-fiction work** will cover blogs, reports, instructions and Explanations. We will cover the following objectives:

## Comprehension

To identify and discuss themes in and across a wide range of writing.

To make comparisons in and across texts.

To identify how language, structure and presentation contribute to meaning.

To discuss and evaluate how authors use language, considering the impact on the reader.

## Composition

To note and develop initial ideas.

To draft by selecting appropriate grammar and vocabulary.

To evaluate and edit texts by assessing the effectiveness of one's own writing.

#### Grammar

To recognise the difference between vocabulary typical of informal speech and the

vocabulary appropriate for formal speech and writing.

To propose changes to grammar and punctuation to enhance effects and clarify meaning.

To revise the use of apostrophes for contraction.

To use conjunctions, adverbs and prepositions to express time and cause.

To use commas to clarify meaning and avoid ambiguity in writing (clauses).

Our **poetry** unit will be based on **Performance poetry** and we will take inspiration from the work of Michael Rosen and Roald Dahl.

Our class novel will be Malamander by Thomas Taylor. We will complete weekly comprehension tasks, creative writing exercises and spelling tests throughout the term.

## Science



Our first topic will be **Living Things and their Habitats**. We will describe how living things are classified into broad groups according to common observable characteristics and will study a range of microorganisms, plants and animals. We will also be introduced to the work of Carl Linnaeus and find out about his system of classification.

After half term we will study **light.** We will learn that light appears to travel in straight lines and that objects are seen because they give out or reflect light into the eye. We will conduct investigations to explain why shadows have the same shape as the objects that cast them. We will study the reflectiveness of materials and will split white light into rainbow colours.

## Throughout both topics we will develop our scientific skills by:

- --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 results using scientific diagrams and labels, tables, scatter graphs, 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 such as displays and other presentations
- --identifying scientific evidence that has been used to support or refute ideas or arguments

## **Computing**



Our first topic is on computer systems and networks. We will:

- Explore how data is transferred over the internet.
- Learn how the internet facilitates online communication and collaboration.
- learn how to communicate responsibly by considering what should and should not be shared on the internet.

After half term we will study **Coding** and will:

- Understand the principles of the code behind computer games.
- Experiment with variables to create different effects.
- Learn about drag and drop programming.
- Explore the commands required to draw shapes and make characters speak and move.
- Discuss gaming ideas and use coding to create our own games.

French	Je me présente  Recap greetings and introducing ourselves in French.  Recap saying how we are.  Ask questions  Numbers up to 30.  Say when our birthday is.  Le loup qui voulait changer de couleur  Explore the vocabulary within the story: days of the week, colours and animals.  Grammar  Masculine and feminine grammar rules.
History	Our topic will be 'The changing power of monarchy from 1066 – present'. We will investigate:  • What are the characteristics of a good monarch? • Was William I a tyrant? • Was King John the worst king in English history? • Did Henry VIII look after the people? • Was Queen Elizabeth I a good monarch? • Why did Charles I lose his head?
Music	
Geography	In geography we will study <b>mountains, volcanoes and earthquakes</b> . We will learn to describe the geology and climates of mountain ranges, will identify the main types of mountains and how they are formed, study the volcanic ring of fire and find out about the movement of tectonic plates and seismic waves. Throughout the topic we will use maps and atlases to locate countries and describe the features studied.
R.E.	We will start the term studying <b>Places of Worship</b> . We will examine how religious buildings exemplify the beliefs and values of religious communities and will deepen our knowledge of signs, symbols and metaphors and how they are used to extend and deepen religious understanding.
	After half term we will study the <b>Christmas</b> story and will investigate Christmas traditions around the world.
Art	
Technology	

PE	
PSHE	<ul> <li>Our topic will be family and friendships. This will include:</li> <li>discussing scenarios where people are torn between 'fitting in' and being true to themselves;</li> <li>explaining how to communicate feelings in different situations;</li> <li>exploring different ways to manage uncomfortable feelings;</li> <li>creating resolutions to different tricky situations;</li> <li>identifying the feelings involved in making a mistake and understanding how to make amends.</li> </ul>