

DT

Design

I can generate, develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.

Make

I can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.

Evaluate

I can investigate and analyse a range of existing products

I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.

Technical Knowledge

I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures

II can understand and use electrical systems in products [for example, series circuits incorporating switches, bulbs, buzzers and motors].

Iron Man

Year Six



Where did he come from? Nobody knows...

In this unit the children will be immersed into all things electricity. They will learn how electricity was first discovered in the past and consider how it can have an influence on our future.

Science

Electricity

I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

Use recognised symbols when representing a simple circuit in a diagram

History

I can identify a significant turning point in British history.

Geography

I can understand human geography including types of settlement and land use and the distribution of natural resources including energy.

Reading

I can apply my growing knowledge of root words, prefixes and suffixes (morphology and etymology), both to read aloud and to understand the meaning of new words that I meet.

I can understand what they read by reading books that are structured in different ways and read for a range of purposes.

I can increasing my familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions.

I can make comparisons within and across books.

I can understand what I read by checking that the book makes sense to me, discussing my understanding and exploring the meaning of words in context.

I understand what I read by drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.

I understand what I read by summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.

I can discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.

I can provide reasoned justifications for my views.

Writing

I can use further prefixes and suffixes and understand the guidance for adding them.

I can use dictionaries to check the spelling and meaning of words, including those of uncommon or more ambitious vocabulary.

I can use a thesaurus.

I can write legibly in joined handwriting when writing at speed, deciding whether or not to join specific letters.

I can plan my writing by identifying the audience for and purpose of the writing, selecting language that shows good awareness of the reader to show good awareness of the reader

I can plan my writing by considering how authors have developed characters and settings in what I have read, listened to or seen performed in narratives.

I can draft and write by describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action in narratives.

I can evaluate and edit by assessing the effectiveness of their own and others' writing.

I can evaluate and edit by proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning.

I can proof-read for spelling and punctuation errors.

I can indicate grammatical and other features by using inverted commas and other punctuation to indicate direct speech.

I can use and understand the grammatical terminology accurately and appropriately in discussing my writing and reading.

Mathematics

I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.

I can round any whole number to a required degree of accuracy.

I can use negative numbers in context, and calculate intervals across zero.

I can solve number and practical problems that involve all of the above.

I can solve addition and subtraction multi step problems in context, deciding which operations and methods to use and why

I can multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication

I can solve problems involving addition, subtraction, multiplication and division

I can divide numbers up to 4 digits by a 2-digit whole number using formal written method (long division), interpret remainders as whole remainders, fractions or by rounding as appropriate for the context

I can divide numbers up to 4 digits by 2-digit number using formal written method (short division) interpreting remainders according to context.

I can identify common factors, common multiples and prime numbers

I can use knowledge of the order of operations to carry out calculations involving their four operations

I can use estimation to check answers determine an appropriate degree of accuracy

I can perform mental calculations, including with mixed operations and large numbers

I can describe positions on the full coordinate grid (all four quadrants)

I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.