



Wow Starter: Dyson Innovators Box

Final Event: Coding Workshop for Parents

## LITERACY

### Reading - word reading UKS2

• e200 apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.

### Reading - comprehension UKS2

• e203 reading books that are structured in different ways and reading for a range of purposes  
• e204 increasing their 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  
• e205 recommending books that they have read to their peers, giving reasons for their choices  
• e206 identifying and discussing themes and conventions in and across a wide range of writing  
• e207 making comparisons within and across books  
• e211 checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context  
• e213 drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence  
• e214 predicting what might happen from details stated and implied  
• e215 summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas  
• e220 participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously  
• e222 provide reasoned justifications for their views.

### Writing - transcription - Spelling UKS2

• e223 use further prefixes and suffixes and understand the guidance for adding them  
• e224 spell some words with 'silent' letters [for example, knight, psalm, solemn]  
• e225 continue to distinguish between homophones and other words which are often confused  
• e227 use dictionaries to check the spelling and meaning of words  
• e228 use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary  
• e229 use a thesaurus.

### Writing - handwriting and presentation UKS2

• e230 write legibly, fluently and with increasing speed by:  
• e231 choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters  
• e232 choosing the writing implement that is best suited for a task.

### Writing - composition UKS2

• e233 plan their writing by:

• e234 identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own  
• e235 noting and developing initial ideas, drawing on reading and research where necessary  
• e236 in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed  
• e237 draft and write by:  
• e238 selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning  
• e240 precisising longer passages  
• e241 using a wide range of devices to build cohesion within and across paragraphs  
• e242 using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]  
• e243 evaluate and edit by:  
• e244 assessing the effectiveness of their own and others' writing  
• e245 proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning  
• e246 ensuring the consistent and correct use of tense throughout a piece of writing  
• e247 ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register  
• e248 proof-read for spelling and punctuation errors

### Writing - vocabulary, grammar and punctuation UKS2

• e250 develop their understanding of the concepts set out in English Appendix 2 by:  
• e252 using passive verbs to affect the presentation of information in a sentence  
• e253 using the perfect form of verbs to mark relationships of time and cause  
• e254 using expanded noun phrases to convey complicated information concisely  
• e255 using modal verbs or adverbs to indicate degrees of possibility  
• e256 using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun  
• e257 learning the grammar for years 5 and 6 in English Appendix 2  
• e258 indicate grammatical and other features by:  
• e259 using commas to clarify meaning or avoid ambiguity in writing  
• e260 using hyphens to avoid ambiguity  
• e261 using brackets, dashes or commas to indicate parenthesis  
• e262 using semi-colons, colons or dashes to mark boundaries between independent clauses  
• e263 using a colon to introduce a list  
• e265 use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

## MATHEMATICS AND COMPUTING

### Number - number and place value UKS2

• m210 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit  
• m211 round any whole number to a required degree of accuracy  
• m212 use negative numbers in context, and calculate intervals across zero  
• m213 solve number and practical problems that involve all of the above.

### Number - addition, subtraction, multiplication and division UKS2

• m214 multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication  
• m215 divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context  
• m216 divide numbers up to 4 digits by a two-digit

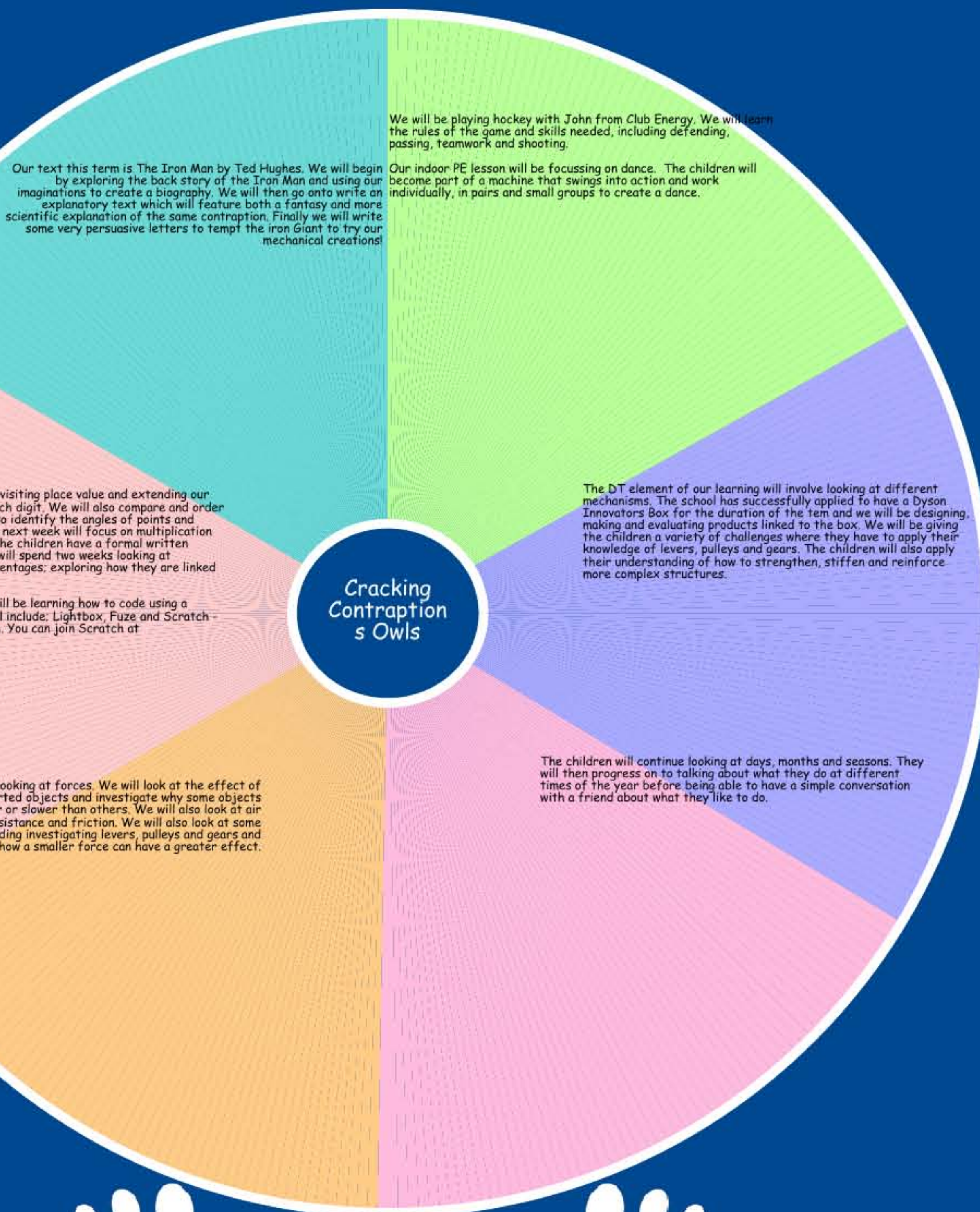
• m229 identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places  
• m233 recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

### Geometry - properties of shapes UKS2

• m252 compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons  
• m254 recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

### UKS2

• co31 I can design, write and debug simple programs to control or simulate physical systems  
• co32 I can solve problems by breaking them down



Cracking Contraption s Owls

Our text this term is The Iron Man by Ted Hughes. We will begin by exploring the back story of the Iron Man and using our imaginations to create a biography. We will then go onto write an explanatory text which will feature both a fantasy and more scientific explanation of the same contraption. Finally we will write some very persuasive letters to tempt the iron Giant to try our mechanical creations!

We will be playing hockey with John from Club Energy. We will learn the rules of the game and skills needed, including defending, passing, teamwork and shooting.

Our indoor PE lesson will be focussing on dance. The children will become part of a machine that swings into action and work individually, in pairs and small groups to create a dance.

We will begin the term by revisiting place value and extending our knowledge of the value of each digit. We will also compare and order numbers. We will then go onto identify the angles of points and calculate missing angles. The next week will focus on multiplication and division - ensuring that the children have a formal written strategy in place. Finally we will spend two weeks looking at Fractions, Decimals and Percentages; exploring how they are linked and calculating with them.

In computing we will be we will be learning how to code using a variety of programs. This will include: Lightbox, Fuze and Scratch - a free downloadable program. You can join Scratch at <https://scratch.mit.edu/>.

The DT element of our learning will involve looking at different mechanisms. The school has successfully applied to have a Dyson Innovators Box for the duration of the term and we will be designing, making and evaluating products linked to the box. We will be giving the children a variety of challenges where they have to apply their knowledge of levers, pulleys and gears. The children will also apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

This term we will be looking at forces. We will look at the effect of gravity on unsupported objects and investigate why some objects fall quicker or slower than others. We will also look at air resistance, water resistance and friction. We will also look at some mechanisms including investigating levers, pulleys and gears and explore how a smaller force can have a greater effect.

The children will continue looking at days, months and seasons. They will then progress on to talking about what they do at different times of the year before being able to have a simple conversation with a friend about what they like to do.

## PHYSICAL EDUCATION

### UKS2

• pe11 I can tell you how I have developed my athletic skills, and which is strongest and which athletics events I prefer  
• pe11.1 I can explain how developing my skills separately has improved my performance in team games  
• pe12 I can play competitive net, striking, fielding and invasion games  
• pe12.1 I can describe both attacking and defending tactics and strategies and begin to apply them  
• pe13 I can identify the techniques I need to practice to improve my strength and performance in athletic activities

• pe14 I can respond to music to create and perform dances, on my own or with a group, that incorporate a range of more complex, controlled and precise movements  
• pe15 I can tell you about outdoor and adventurous activities I have achieved on my own  
• pe15.1 I can tell you about outdoor and adventurous activities I have achieved in a team  
• pe16.1 I can show you how I have improved in different activities over time  
• pe16.2 I can tell you my personal best in a particular activity and my aspirations for the future

## EXPRESSIVE ARTS AND DESIGN

### Design UKS2

• dt55 I can talk about my product and explain my design ideas and where they came from  
• dt56 I can tell you for whom I have designed my product and why I think my product would be useful to them  
• dt57 I can communicate my ideas through annotated sketches

### Make UKS2

• dt64 I can join, assemble and combine components with precision

### Evaluate UKS2

• dt69 I can compare my design to those of existing products and can suggest improvements I could make in the light of those comparisons

### Technical knowledge UKS2

• dt73 I can strengthen, stiffen and reinforce more complex structures  
• dt74 I know how to use gears and pulleys in my designs  
• dt75 I know how to use cams in my designs  
• dt76 I know how to use levers and linkages in my designs

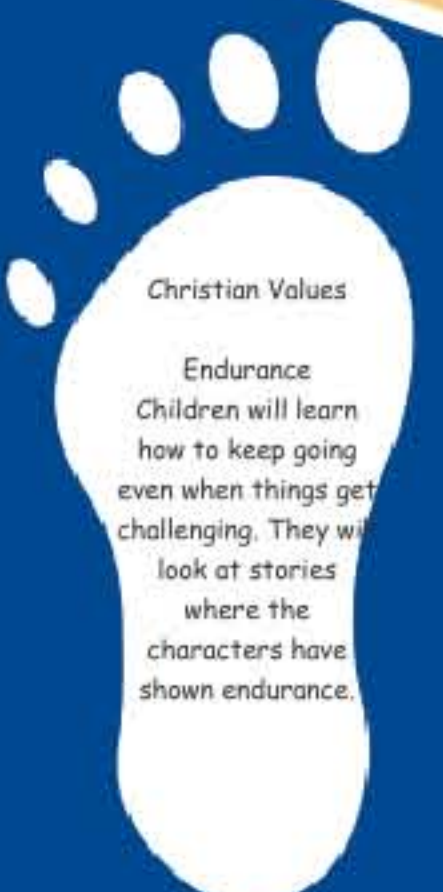
## COMMUNICATION AND LANGUAGE

### UKS2

• fl1 I can understand what is being said to me and respond correctly  
• fl2 I can sing songs and say poems in another language and know what the words mean  
• fl3 I can have a conversation including asking and answering questions

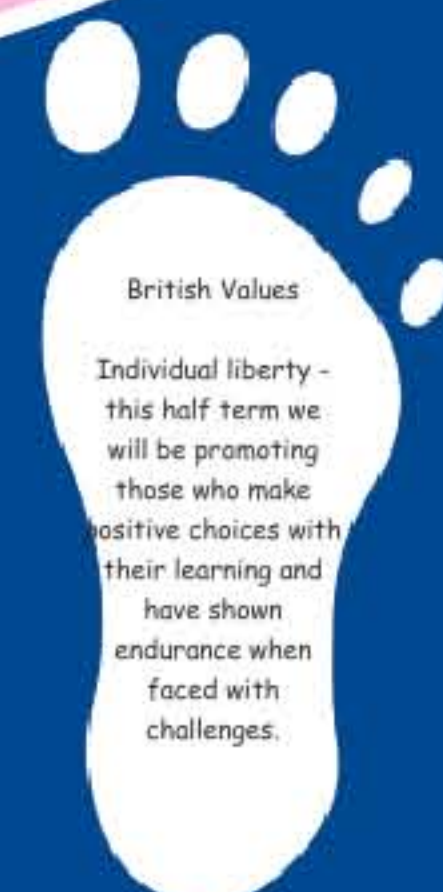
• fl3.2 I can ask for clarification of information or for help  
• fl5 I can pronounce words correctly so that I am understood  
• fl12 I know that some words are governed by gender  
• sl28 articulate and justify answers, arguments and opinions

## OUTDOOR LEARNING



Christian Values  
Endurance  
Children will learn how to keep going even when things get challenging. They will look at stories where the characters have shown endurance.

Kilvrough  
They will complete a range of activities in the outdoor environment.



British Values  
Individual liberty - this half term we will be promoting those who make positive choices with their learning and have shown endurance when faced with challenges.