



Wow Starter: What is electricity? Where is it?  
CAN WE SEE IT?

Final Event: Exhibition of Electric room models (shoe boxes)

## UNDERSTANDING THE WORLD

### Working scientifically LKS2

- **sc32** asking relevant questions and using different types of scientific enquiries to answer them
- **sc33** setting up simple practical enquiries, comparative and fair tests
- **sc36** recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- **sc37** reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- **sc38** using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

### Electricity LKS2

- **sc75** identify common appliances that run on electricity
- **sc76** construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- **sc77** identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- **sc78** recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

- **sc79** recognise some common conductors and insulators, and associate metals with being good conductors.

### Location knowledge LKS2

- **ge27** I can identify the countries of Europe (including Russia) on a map or globe
- **ge28** I can identify North and South America on a map or globe
- **ge30** I can talk about the environmental regions and key human and physical characteristics of the countries I can identify
- **ge35** I know how and why human and physical features in the landscape change over time (e.g. river courses or patterns of settlement)
- **ge36** I understand latitude and can locate and name the Equator, Northern and Southern hemispheres, the Tropics of Cancer and Capricorn and the Arctic and Antarctic circles

### Place knowledge LKS2

- **ge38** I can describe the geographical similarities and differences of the physical features of contrasting locations in the UK, Europe and a region of North and South America

## MATHEMATICS AND COMPUTING

### Number - number and place value LKS2

- **m80** count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- **m81** recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- **m82** compare and order numbers up to 1000
- **m83** identify, represent and estimate numbers using different representations

### Number - addition and subtraction LKS2

- **m86** add and subtract numbers mentally, including:
  - **m87** a three-digit number and ones
  - **m88** a three-digit number and tens
  - **m89** a three-digit number and hundreds
- **m90** add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction

### Number - multiplication and division LKS2

- **m93** recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

### Number - fractions LKS2

- **m96** count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- **m97** recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- **m100** add and subtract fractions with the same denominator within one whole [for example,  $5/7 + 1/7 = 6/7$ ]

### Geometry - properties of shapes LKS2

- **m110** draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- **m111** recognise angles as a property of shape or a description of a turn

### Statistics LKS2

- **m114** interpret and present data using bar charts, pictograms and tables

### Number - number and place value LKS2

- **m116** count in multiples of 6, 7, 9, 25 and 1000
- **m117** find 1000 more or less than a given number
- **m118** count backwards through zero to include negative numbers
- **m119** recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

- **m120** order and compare numbers beyond 1000
- **m122** round any number to the nearest 10, 100 or 1000
- **m123** solve number and practical problems that involve all of the above and with increasingly large positive numbers
- **m124** read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.

### Number - addition and subtraction LKS2

- **m125** add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

### Number - multiplication and division LKS2

- **m128** recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- **m129** use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

### Number - fractions (including decimals) LKS2

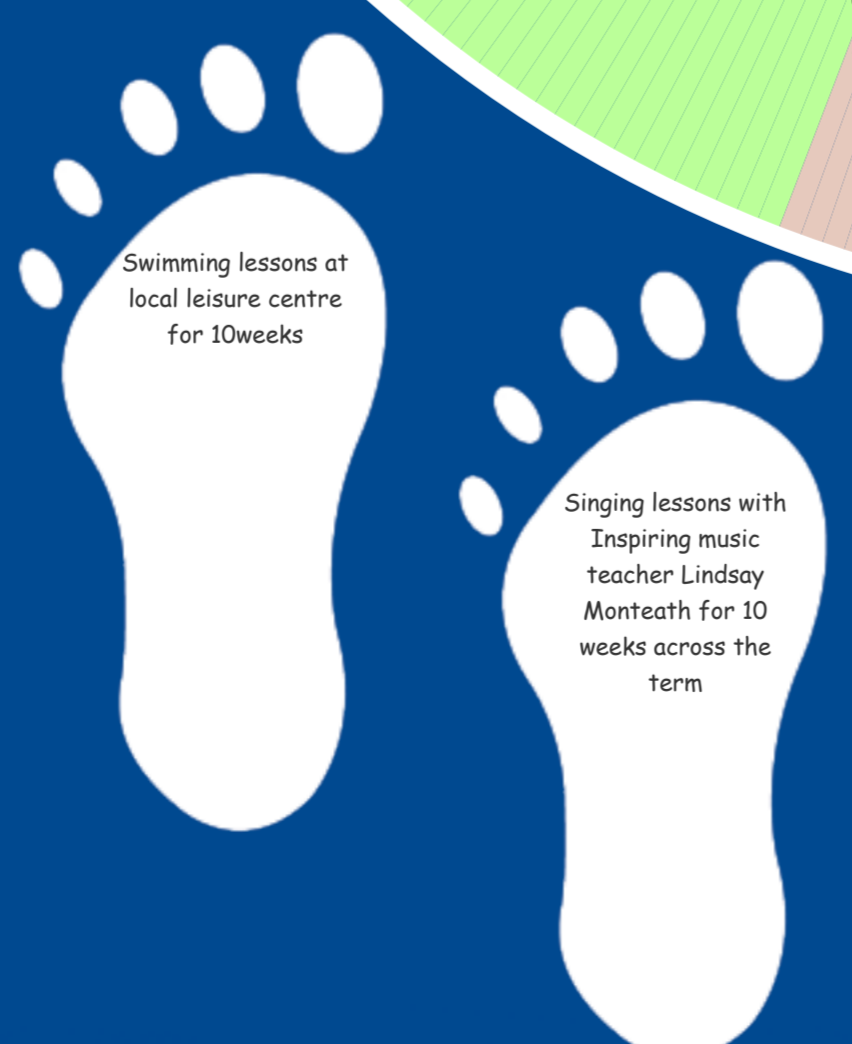
- **m133** recognise and show, using diagrams, families of common equivalent fractions
- **m136** add and subtract fractions with the same denominator
- **m137** recognise and write decimal equivalents of any number of tenths or hundredths
- **m138** recognise and write decimal equivalents to  $1/4$ ,  $1/2$ ,  $3/4$

### Geometry - properties of shapes LKS2

- **m150** identify acute and obtuse angles and compare and order angles up to two right angles by size
- **m151** identify lines of symmetry in 2-D shapes presented in different orientations

### LKS2

- **co15** I can solve problems by breaking them down into progressive steps
- **co16** I am aware that programs follow a sequence from one instruction to the next
- **co23** I understand internal computer networks (intranet) and external networks (internet) and the opportunities they provide
- **co24** I can use search technologies effectively
- **co25** I am aware that information from some sources may not be accurate



## PHYSICAL EDUCATION

## EXPRESSIVE ARTS AND DESIGN

### LKS2

- **ad10** I can show in my sketch book how I have developed techniques and ideas
- **ad12** I can show examples of drawing using pencil and charcoal.

### Design LKS2

- **dt25** I can talk about my product and explain my design ideas and where they came from
- **dt26** I can tell you for whom I have designed my product and why I think my product would be useful to them
- **dt27** I can communicate my ideas through annotated sketches
- **dt29** I can make a model of my design

### Make LKS2

- **dt32** I can select and use appropriate tools and techniques for my product
- **dt33** I can measure, mark, cut and shape a range of materials accurately

- **dt37** I can discuss the aesthetic qualities of my product in relation to the properties of the materials etc I am intending to use

### Evaluate LKS2

- **dt38** I can talk about existing products similar to my own
- **dt39** I can compare my design to those of existing products and can suggest improvements I could make in the light of those comparisons
- **dt40** I have asked for the views of others, especially the intended users, to help to improve my design

### LKS2

- **mu11** I can sing in a group, or on my own, with expression, awareness of others and in tune
- **mu16** I can listen carefully and perform accurately from memory

## LITERACY

### Reading - word reading LKS2

- **e135** apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they meet
- **e136** read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

### Reading - comprehension LKS2

- **e137** develop positive attitudes to reading and understanding of what they read by:
- **e139** reading books that are structured in different ways and reading for a range of purposes
- **e140** using dictionaries to check the meaning of words that they have read
- **e141** increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
- **e146** understand what they read, in books they can read independently, by:
- **e147** checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
- **e148** asking questions to improve their understanding of a text
- **e150** predicting what might happen from details stated and implied
- **e152** identifying how language, structure, and presentation contribute to meaning

### Writing - transcription - Spelling LKS2

- **e155** use further prefixes and suffixes and understand how to add them (English Appendix 1)

- **e156** spell further homophones
- **e157** spell words that are often misspelt (English Appendix 1)
- **e159** use the first two or three letters of a word to check its spelling in a dictionary

### Writing - handwriting LKS2

- **e161** use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- **e162** increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

### Writing - composition LKS2

- **e163** plan their writing by:
- **e165** discussing and recording ideas
- **e166** draft and write by:
- **e167** composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2)
- **e168** organising paragraphs around a theme
- **e169** in narratives, creating settings, characters and plot

### Writing - vocabulary, grammar and punctuation LKS2

- **e179** choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition
- **e180** using conjunctions, adverbs and prepositions to express time and cause

## COMMUNICATION AND LANGUAGE

### LKS2

- **fl1** I can understand what is being said to me and respond correctly
- **fl3** I can have a conversation including asking and answering questions
- **fl5** I can pronounce words correctly so that I am understood
- **fl12** I know that some words are governed by gender
- **sl13** listen and respond appropriately to adults and their peers

- **sl14** ask relevant questions to extend their understanding and knowledge
- **sl16** articulate and justify answers, arguments and opinions
- **sl18** maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- **sl21** participate in discussions, presentations, performances, role play, improvisations and debates

## PSED & RELIGIOUS EDUCATION

### PSED Preparing to play an active role as citizens LKS2

- **re25** Continue to explore contributions of others in their own lives and in participating in activities

### RE - Learning From Religion LKS2

- **rf25** Response to the challenges of commitment in their own lives and in participating in activities



# Shocking Electricity and Around the World - Stage Coverage

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### Location knowledge **LKS2**

- **ge27** locate the world's countries, using maps to focus on Europe (including the location of Russia)
- **ge28** locate the world's countries, using maps to focus North and South America,
- **ge30** locate the world's countries, using maps to focus on their environmental regions, key physical and human characteristics
- **ge35** name human and physical characteristics and understand how some of these aspects have changed over time
- **ge36** identify the position and significance of longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle

### Place knowledge **LKS2**

- **ge38** understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

## MATHEMATICS AND COMPUTING

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### Geometry - properties of shapes **LKS2**

## PHYSICAL EDUCATION

### LKS2

- **pe4.1** use running, jumping, throwing and catching in combination
- **pe5** play competitive games, modified where appropriate
- **pe5.1** play competitive games and apply basic principles suitable for attacking and defending

### Swimming and water safety **LKS2**

- **pe10** swim competently, confidently and proficiently over a distance of at least 25 metres
- **pe10.1** use a range of strokes effectively such as front crawl, backstroke and breaststroke

## EXPRESSIVE ARTS AND DESIGN

### LKS2

- **ad10** to create sketch books to record their observations and use them to review and revisit ideas
- **ad12** to improve their mastery of art and design techniques, including drawing with pencil and charcoal

### Design **LKS2**

- **dt25** use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose
- **dt26** use research and develop design criteria to particular individuals or groups
- **dt27** generate, develop, model and communicate their ideas through discussion and annotated sketches
- **dt29** generate, develop, model and communicate their ideas through prototypes

### Make **LKS2**

- **dt32** select from and use a wider range of tools and equipment to perform practical tasks
- **dt33** use a wider range of tools and equipment to perform practical tasks accurately
- **dt37** select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their aesthetic qualities

### Evaluate **LKS2**

- **dt38** investigate a range of existing products
- **dt39** analyse a range of existing products
- **dt40** evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

### LKS2

- **mu11** perform in solo and ensemble contexts, using their voices with increasing accuracy, fluency, control and expression
- **mu16** listen with attention to detail and recall sounds with increasing aural memory

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## COMMUNICATION AND LANGUAGE

### LKS2

- **fl1** listen attentively to spoken language and show understanding by joining in and responding
- **fl3** engage in conversations; ask and answer questions
- **fl5** develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases
- **fl12** understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms
- **sl13** listen and respond appropriately to adults and their peers
- **sl14** ask relevant questions to extend their understanding and knowledge
- **sl16** articulate and justify answers, arguments and opinions
- **sl18** maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
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## PSED & RELIGIOUS EDUCATION

### PSED Preparing to play an active role as citizens **LKS2**

- **pa25** Continue to value contributions of others in discussion.
- **pa29** Understand there are consequences when rules are broken.
- **pa30** Distinguish between accidental and deliberate actions.

### PSED Developing a healthy, safer lifestyle **LKS2**

- **ph15** Behave safely and responsibly in different situations.
- **ph16** Follow school rules about health and safety, basic emergency aid procedures and where to get help.
- **ph17** Extend strategies to cope with risky situations.
- **ph18** To increase awareness of personal bodily hygiene.

### RE - Learning From Religion **LKS2**

- **rf25** Response to the challenges of commitment in their own views and in religious traditions.
- **rf27** Discuss their own and others' religious beliefs, includig worship.
- **rf28** Reflect on ideas of right and wrong and others' response to them.

### Learning About Religion **LKS2**

- **ra26** Describe aspects of religion, especially the people, stories and traditions that influence the beliefs and values of others.
- **ra27** Describe the variety of practices and ways of life in religions.
- **ra28** Identify and describe the similarities in religions.

