



Tomorrow's World

Year 4 - Spring 2



Our Key Enquiry Questions are...

How has science and technology shaped the world we live in?

How has technology evolved over time?

Websites:

<http://www.primaryhomeworkhelp.co.uk/revision/Science/electricity.htm>

<https://www.topmarks.co.uk/Search.aspx?q=electricity>

<http://www.switchedonkids.org.uk/>

<https://www.bbc.co.uk/bitesize/clips/zxrb4wx>

<https://wowscience.co.uk/>

<https://www.topmarks.co.uk/Search.aspx?q=sound>

<http://www.sciencekids.co.nz/sound.html>

<https://www.bbc.co.uk/bitesize/topics/zgffr82>

<http://www.crickweb.co.uk/ks2science.html>

Please tweet us using the hashtags below if you see your child showing any of our Archibald qualities.

We will continue to teach the children how to make the right choices and be **#ResponsibleCitizens**

Through our creative curriculum, we will be **#HavingFun** whilst learning.

We will continue to inspire and develop **#ConfidentIndividuals**

Key Dates and Reminders:

PE Class 10—Wednesday & Thursday

Class 9—Monday & Thursday

The School will close for Easter on Friday 2nd April and will reopen on Monday 19th April.

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Literacy

This half term, children will complete reading and writing tasks based upon the novel, *Kensuke's Kingdom* by Michael Morpurgo. The children will write from different viewpoints, complete diary entries, adventure stories, a balanced argument, a playscript and a news report. In all written work, children will propose changes to grammar, punctuation and vocabulary to improve consistency and accuracy. They will follow the model of plan, write and edit. Children will also complete reading and writing tasks linked to their work on *Tomorrow's World*. In speaking and listening, children will take part in drama, role play and hot-seating activities. They will also have the opportunity to present their work to others, where appropriate, using ICT.

Guided Reading and Comprehension sessions will take place weekly; children will complete a series of activities and tasks to support with the acquisition and development of reading skills. Handwriting homework will be sent home weekly, where appropriate, alongside spelling activities.

Numeracy

The children will add and subtract mentally pairs of two and three digit numbers. They will be encouraged to explain their methods orally. They should learn the multiplication facts up to 12 x 12 and be able to derive the corresponding division facts. They will use fractions and decimals to order, add and subtract numbers; and to solve word problems involving one or two steps. They will choose and use standard metric units and their abbreviations when estimating, measure and recording capacity. Each week, children will be presented with a series of puzzles and will be encouraged to explain their thinking in order to develop their reasoning skills. Children will also use ICT to support their learning. Weekly homework tasks will centre around work covered in class and core basic skills.

PE *Having fun, keeping healthy and learning new skills...*

Children will continue to enjoy weekly sessions of outdoor PE where they will develop agility, balance and coordination through a series of non contact games and activities. They will also continue with the Daily Mile.

PSHE

The focus for this half term will be *Money and Work*. As part of learning about the wider world, we will explore money and work. We will find out about different ways to pay, track and save money. This links well to Numeracy where we will continue to learn how to use money correctly. We will also find out about careers and the kind of skills required for each job.

RE *Developing respect, tolerance, understanding and knowledge...*

This half term, the children will be learning about different religious Celebrations. In this topic the children will learn and gain new knowledge about the importance and significance of religious celebrations. Celebrations studied this term will be: Easter, Holi, Passover and Eid.

Music—*listening, appreciating, interpreting, playing, developing...*

Children will continue with their weekly 'Charanga' music sessions. The focus for this half term will be learning to play the glockenspiel.

Computing

The children will use ICT to support learning in other curriculum subjects. They will undertake research using selected websites and software, and will present their findings in different ways. They will continue to refine their coding skills in order to produce algorithms, independently using logical and appropriate structures to organise and record data.

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Science *The key enquiry questions will be explored through the following activities.*

Children will learn about recent scientific innovations and their impact. They will explore the questions: **How has science and technology shaped the world we live in? How has technology evolved over time?**

Electricity

Children will learn about how to use electricity safely and the dangers associated with misuse. They will make their own electric circuits with a break, and learn how to make bulbs brighter and dimmer. They will learn and interpret electricity symbols, and use these to draw their own circuit diagrams. Children will have the opportunity to use a range of ICT programs to carry out experiments and learn more about circuits and conductors. They will learn about the different types of electricity, how it is generated and the journey into our homes.

Sound

Children will study sound. They will investigate how sounds are made when objects vibrate, but that vibrations are not always directly visible. They will be taught how to change the pitch and loudness of sounds produced by some vibrating objects. They will learn that vibrations from sound sources require a medium through which to travel to the ear.

Scientific Enquiry

Children will further develop their skills and learn how to be an effective scientist. They will record their work in a variety of ways including: written reports, graphs, charts, diagrams and tables. Children will be encouraged to think independently and raise questions about working scientifically and the knowledge and skills it brings. Children will develop practical skills in a range of contexts, and plan and carry out investigations, making predictions, considering evidence and drawing conclusions. Children will be encouraged to use and apply the correct terminology and demonstrate their understanding in written and verbal form.



Researching



Fair testing



Identifying and classifying



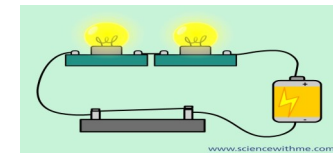
Observation over time



Pattern seeking



Observation over time, Identifying and Classifying, Researching, Fair Testing, Pattern seeking



www.sciencewithtime.com

Topic (History & Geography)

History—We will be looking into the history of electricity and how it has had an impact on life today. Throughout the topic, we will be researching famous inventors and how they implemented their inventions into the world. Linking to the concepts above, we will focussing on the significance of electricity and whether we can live without it.

Geography— In terms of geography, we will be looking at electricity across the globe and asking ourselves the following questions. *Do all countries in the world have access to electricity? Does everybody use electricity in the same way? Where is electricity most used?* To answer these questions, we will be looking at a range of maps and online resources.

Art/Design Technology

Children will develop skills of shading to show light and shadow and will experiment with different pencils to create a range of effects, including optical illusions. They will explore the work of Bridget Riley, the futuristic artists, Umberto Boccioni, and Giacomo Balla and the work of Peter Thorpe. They will create art work in the same style, using different printing techniques and materials.

In DT, the children will use a range of techniques to design, make and evaluate a 'model of the future' with an electrical circuit and a switch.

Chronology, Cause and Consequence, Historical Significance, Continuity and Change

Location and Place, Cause and Effect, Planning and Decision Making, Change



Key Vocabulary

Science (*Electricity and Sound*)

Circuit	voltage
Conductor	component
Insulator	source
Generate	cell
Power Station	appliance
Vibration	energy
Volume	pitch
Percussion	medium



Can you find out what these words mean? Use the non-fiction texts to help you.

Science (*Scientific enquiry*)

Research
Hypothesis
Enquiry
Prediction
Fair test
Conclusion
Data
Patterns
Record



Numeracy

Place value	fraction
Inverse operation	decimal
Multiples	data
Estimate	statistics
Rounding	frequency

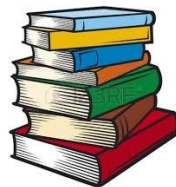


Key Stage 2

- *Use a dictionary to find out the meanings of these words.*
- *Have you ever come across the words before in a different topic / subject?*
- *Can you think of alternative words to use?*
- *Can you use these words within your work?*

Literacy

Expanded noun phrase	synonym
Balanced argument	metaphor
Antonym	prefix
Clause	suffix
Commas	pronoun



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