



# Year 6 - Home Isolation Science Learning Page



## Autumn 2 2021

In Year 6 this half term the focus of our Science learning is '**Electricity**.' Here is the key learning from the National Curriculum that will be covered:

- 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.



<p><b>Lesson 1</b> What is static electricity?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will be learning all about static electricity. We will learn how static charges occur and what happens when they are discharged. We will also be exploring how to create our own static charges with a balloon! If you have a balloon at home then you can use it for this lesson. If you don't then don't worry, you will still be able to watch the demonstrations and complete the lesson.</p>	<p><a href="https://classroom.thenational.academy/lessons/what-is-static-electricity-74tk2t">https://classroom.thenational.academy/lessons/what-is-static-electricity-74tk2t</a></p>
<p><b>Lesson 2</b> What are the different components in an electrical circuit?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will learn how to build an electrical circuit. We will look at all the different components of an electrical circuit and learn the rules for building them. You will need a piece of paper, a pencil and a ruler for this lesson.</p>	<p><a href="https://classroom.thenational.academy/lessons/what-are-the-different-components-in-an-electrical-circuit-cdk34d">https://classroom.thenational.academy/lessons/what-are-the-different-components-in-an-electrical-circuit-cdk34d</a></p>
<p><b>Lesson 3</b> What are circuit diagrams?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will be learning how electrical circuits are represented as diagrams. We will learn the symbol for each component and draw our own circuit diagrams. You will need a pencil, a piece of paper and a ruler.</p>	<p><a href="https://classroom.thenational.academy/lessons/what-are-circuit-diagrams-6ngk0c">https://classroom.thenational.academy/lessons/what-are-circuit-diagrams-6ngk0c</a></p>
<p><b>Lesson 4</b> What are insulators and conductors?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will learn what an electrical conductor and an electrical insulator are. We will conduct an investigation to see which materials are insulators and which are conductors. Finally, we will draw conclusions about the best material to make certain objects from, based on what we have learnt. You will need a piece of paper, a pencil and a ruler.</p>	<p><a href="https://classroom.thenational.academy/lessons/what-are-insulators-and-conductors-6rtp8t">https://classroom.thenational.academy/lessons/what-are-insulators-and-conductors-6rtp8t</a></p>
<p><b>Lesson 5</b> What happens in a circuit when we change the components?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will be learning about voltmeters and ammeters. We will then investigate what happens when we change the number of cells and lamps in a circuit. We will be writing predictions and conclusions in this lesson. You will need a pencil, a piece of paper and a ruler.</p>	<p><a href="https://classroom.thenational.academy/lessons/what-happens-in-a-circuit-when-we-change-the-components-60wp2r">https://classroom.thenational.academy/lessons/what-happens-in-a-circuit-when-we-change-the-components-60wp2r</a></p>
<p><b>Lesson 6</b> How much do we rely on electricity?</p>	<p><b>Follow the link to the Oak Academy to complete a series of activities:</b> In this lesson, we will learn about mains and battery electricity. We will identify and sort appliances based on whether they are electrical or non-electrical and also whether they are powered by mains or battery electricity. We will explore the idea of a world without electricity.</p>	<p><a href="https://classroom.thenational.academy/lessons/how-much-do-we-rely-on-electricity-cnhkct">https://classroom.thenational.academy/lessons/how-much-do-we-rely-on-electricity-cnhkct</a></p>

**Don't forget to use your Science Knowledge Organiser for this half term - Year 6 Electricity - to help you learn and understand about this topic.**