



# March 2025

## 11+ Physics

Date	Topic	National Curriculum Link	Session objectives	Ideas for home
6 <sup>th</sup> March	Our Earth	<ul style="list-style-type: none"> <li>the seasons and the Earth's tilt, day length at different times of year, in different hemispheres</li> </ul>	<ul style="list-style-type: none"> <li>Describe how the Sun, Earth and Moon move in relation to each other</li> <li>Explain, in terms of the Earth and Sun, how we get days, years and seasons</li> </ul>	<ul style="list-style-type: none"> <li>Choose different locations around the world to find out about their weather now compared to the UK and how their weather varies with the seasons.</li> <li>Draw the shadow of a particular object outdoors at the same time of day for a week/month to see how the shadow varies- what does this tell you about how the sun moves in the sky?</li> </ul>
13 <sup>th</sup> March	The Moon	<ul style="list-style-type: none"> <li>the seasons and the Earth's tilt, day length at different times of year, in different hemispheres</li> </ul>	<ul style="list-style-type: none"> <li>Name and describe the different phases of the Moon</li> <li>Explain why we have different phases of the Moon</li> <li>Explain how solar and lunar eclipses occur</li> </ul>	<ul style="list-style-type: none"> <li>Try to view the next lunar eclipse (Friday 14<sup>th</sup> March from approximately 6am) and the next solar eclipse (Saturday 29<sup>th</sup> March from 10am-12pm) *Only use solar glasses given in class to look at the sun* (details of timings/how to spot here: <a href="https://www.timeanddate.com/eclipse/in/uk/durham?iso=20250314">https://www.timeanddate.com/eclipse/in/uk/durham?iso=20250314</a>)</li> </ul>
20 <sup>th</sup> March	Our Solar System	<ul style="list-style-type: none"> <li>gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars</li> </ul>	<ul style="list-style-type: none"> <li>Recall and compare the different planets in our Solar System</li> <li>Produce a scale model Solar System</li> </ul>	<ul style="list-style-type: none"> <li>Produce a fact file about a planet in our Solar System</li> <li>Find out about how our ideas about the Solar System have changed over time</li> </ul>
27 <sup>th</sup> March	Our Solar System	<ul style="list-style-type: none"> <li>gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars</li> </ul>	<ul style="list-style-type: none"> <li>Describe other features of our Solar System, including meteors and comets</li> </ul>	
3 <sup>rd</sup> April	Satellites	<ul style="list-style-type: none"> <li>gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars</li> </ul>	<ul style="list-style-type: none"> <li>Describe the different ways that satellites can be used</li> <li>Discuss the issues of space junk caused by satellites</li> </ul>	<ul style="list-style-type: none"> <li>Make a list of all the different ways that satellites are used in your day-to-day life</li> <li>Research what life is like living on the ISS</li> <li>Try to spot the ISS pass by- use the website <a href="https://spotthestation.nasa.gov/">https://spotthestation.nasa.gov/</a> to find out potential viewings</li> </ul>
10 <sup>th</sup> April	Beyond the Solar System	<ul style="list-style-type: none"> <li>our Sun as a star, other stars in our galaxy, other galaxies</li> <li>the light year as a unit of astronomical distance</li> </ul>	<ul style="list-style-type: none"> <li>Describe other features that can be found beyond our Solar System</li> <li>Explain what a light year is</li> </ul>	<ul style="list-style-type: none"> <li>Find out about the search for exoplanets and some of those that have been discovered so far</li> </ul>