

## Above and Beyond – Science (Year 7)

<b>1</b>	<b>Title: A species</b>	<b>5</b>	<b>Title: Electric pioneers</b>
	<b>Details:</b> Choose a species of animal or plant to research and find out about in detail. Describe their habitat and food source, their adaptations and method of reproduction. Examine any issues around their evolution and what if any impact humans are having on them. This can be presented in the form of a poster or newspaper article with relevant images.		<b>Details:</b> Find out about the work of Luigi Galvani (1737-1798) and Alessandro Volta (1745-1827) and write a newspaper article explaining their work and discoveries led to the development of the battery.
	Curriculum link: 7B.1 Interdependence and variation		Curriculum link: 7P2 Voltage resistance and current
	House Points: 25		House Points: 50
<b>2</b>	<b>Title: Super fast animals !</b>	<b>6</b>	<b>Title: Old Metals</b>
	<b>Details:</b> Produce a fact-file about the fastest creatures on the planet. How fast are they? How long can they travel at their top speed for? What adaptations do they have to allow them to move so quickly? Why is their speed an advantage? Include any other facts that you think are interesting. Also, what is the fastest that any human has travelled?		<b>Details:</b> Find out about the history of metals. When did people start to use them and how did the type of metals being used change over time. Look into different metal extraction techniques and consider their environmental impact.
	Curriculum link: 7P1 Speed and gravity		Curriculum link: 7C2 Metals and 7C3 Rocks and the rock cycle
	House Points: 50		House Points: 50
<b>3</b>	<b>Title: Water</b>	<b>7</b>	<b>Title: Lifestyle choices</b>
	<b>Details:</b> Find out what “potable water” is. Describe how seawater is turned into potable water. Try to find out why we may have to rely more on desalination in the future.		<b>Details:</b> Create a video about the dangers of taking drugs while pregnant, remember any substance which affects the body is a drug. So consider the legal drugs such as coffee, nicotine, alcohol and painkillers to find out if they can do the unborn child any harm. Describe the effect on the baby and how it gets from the mother to her child. Explain why some pregnant mothers continue to take drugs even if they know it may harm their pregnancy.
	Curriculum link: 7C1 Particle model and separation		Curriculum link: 7B.3 Plant and human reproduction
	House Points: 25		House Points: 50
<b>4</b>	<b>Title: The brain</b>	<b>8</b>	<b>Title: Amazing hearing</b>
	<b>Details:</b> The Brain is one of the most important and complex organs in the body. Over the last 20 years a huge amount of research has allowed scientists to discover the many parts and ways in which they work. Create a fact sheet or poster on the structure and function of the brain. Find out about the different techniques to study it and any conditions which can arise when the brain is damaged. Use		<b>Details:</b> Find out what ultrasound is, and which animals can hear and/or make ultrasound, and why being able to do so is useful to them. Present your findings as a nature magazine article. Your article should include relevant images.
	Curriculum link: 7B2 Movement and cells		Curriculum link: 7P4 Sound and Light
	House Points: 25		House Points: 50