

Topic	I know	I am unsure	I need to learn
1. Life support – Learn about			
Respiration in cells			
The role of the blood			
Breathing			
Gas exchange			
Circulation and blood vessels			
Fitness			
Digestion			
Nutrients			
2. Periodic Table and Materials – Learn about			
Elements and compounds			
Using different metals			
The periodic Table			
Metals and non metals			
Nobel gas properties			
Using Nobel gases			
The properties of Halogens			
Using Halogens and their compounds			
Elements in your body			
Using carbon, hydrogen and oxygen			
Silicon and its compounds			
3. Heating and Cooling - Learn about			
How to measure temperature			
About the transfer of heat energy			
Thermal conduction and insulation			
The transfer of heat energy in liquids and gases			
Convection currents and their uses			
Infrared radiation			
Reducing heat loss			
Conserving energy			
Sankey diagrams			
4. Keeping Healthy - Learn about			
To know about the three different types of microbes			
To know the effect of pathogens in the body			
How to prevent infection			
About vaccination and immunity			
The effect of cigarettes, alcohol and cannabis			
About stem cell therapies			
5. Metal Reactions - Learn about			
What metals are used for and their properties			
How different metals react with water			
The reactivity series			
How metals react in acid			
What happens when metals are burnt			
The extraction of tin			

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6. Light and Sound - Learn about			
To know how light travels			
About reflection in a plane mirror			
Reflection from rough and smooth surfaces			
Refraction of light			
Total internal reflection			
Dispersion of light			
Colour mixing			
Using lasers			
How vibrations cause sound			
How we hear			
About the loudness of sound			
How we reduce noise			
Frequency and pitch			
Echoes			
Ultrasound and ultrasonic			
How sound is produced by musical instruments			
Musical notes			
The speed of sound and the speed of sound			
7. Rocks - Learn about			
What causes volcanoes to erupt			
The properties of igneous rock			
How igneous rocks form			
How fossils are formed			
How sedimentary rocks form			
Types of sedimentary rocks			
How metamorphic rocks form and their properties			
The rock cycle			
8. Environment - Learn about			
The adaptations of animals for their environment			
How animals compete			
How animals are adapted to survive			
About food webs, photosynthesis and biomass			
How we get our food			
How producing food affects the environment			
Sustainable development – plant tree when we cut them down etc			
9. Moving around - Learn about			
Turning forces			
Using levers as machines			
What keeps things moving in a circle			
Acceleration due to gravity			
Terminal velocity			
What causes pressure the effect of acceleration and deceleration			