

Year 7 Science Planning Outline – Autumn Term

These are the subjects covered in the Autumn Term. The exact timing and order of them may be subject to change.

Area of curriculum	Pupils should be taught
Respiration & Breathing (Biology)	<ul style="list-style-type: none"> • What is respiration / breathing? –Definitions • the role of lung structure in gas exchange, including the effect of smoking • <i>KS3 Science Revision Guide pages: 15, 16, 17</i>
Respiration & Breathing (Biology)	<ul style="list-style-type: none"> • that the reactants and products of respiration are transported throughout the body in the bloodstream • link respiration to glucose and bring in digestion • <i>KS3 Science Revision Guide pages: 10, 17</i>
Digestion & Nutrition (Biology)	<ul style="list-style-type: none"> • that food is used as a fuel during respiration to maintain the body's activity and as a raw material for growth and repair • Talk about food as chemical energy; discuss the energy change of chemical energy -> heat and movement • <i>KS3 Science Revision Guide pages: 7, 8, 99</i>
Digestion & Nutrition (Biology)	<ul style="list-style-type: none"> • the principles of digestion, including the role of enzymes in breaking down large molecules into smaller ones • that the products of digestion are absorbed into the bloodstream and transported throughout the body, and that waste material is egested • <i>KS3 Science Revision Guide pages: 8, (9), 10</i>
Digestion & Nutrition (Biology)	<ul style="list-style-type: none"> • about the need for a balanced diet containing carbohydrates, proteins, fats, minerals, vitamins, fibre and water, and about foods that are sources of these the principles of digestion • <i>KS3 Science Revision Guide pages: 7</i>
Reproduction (Biology)	<ul style="list-style-type: none"> • about the physical and emotional changes that take place during adolescence • about the human reproductive system, including the menstrual cycle and fertilisation • <i>KS3 Science Revision Guide pages: 12, 13,</i>
Reproduction (Biology)	<ul style="list-style-type: none"> • how the foetus develops in the uterus, including the role of the placenta • <i>KS3 Science Revision Guide pages: 14</i>
Acids & alkalis (Chemistry)	<ul style="list-style-type: none"> • to use indicators to classify solutions as acidic, neutral or alkaline and to use the pH scale as a measure of the acidity of a solution • how metals and bases, including carbonates, react with acids and the products of these reactions • <i>KS3 Science Revision Guide pages: 68, 69, 70</i>
Acids & alkalis (Chemistry)	<ul style="list-style-type: none"> • about some everyday applications of neutralisations [e.g. <i>the treatment of acid indigestion, the treatment of acid soil, the manufacture of fertilizer</i>] • <i>KS3 Science Revision Guide pages: 70, 71</i>
Acids & alkalis (Chemistry)	<ul style="list-style-type: none"> • how acids in the environment can lead to corrosion of metal and chemical weathering of rock [e.g. <i>limestone</i>] • <i>KS3 Science Revision Guide pages: 71, 72</i>
Acids & alkalis (Chemistry)	<ul style="list-style-type: none"> • <i>KS3 Science Revision Guide pages:</i>