

## Long Term Sequence for Science

Phase 1 / 2	<p><b>Physics</b> Seasonal Changes: weather, day &amp; night</p> <p><b>The study of energy forces, mechanics, waves, structure of atoms, physical universe</b></p> <p style="text-align: center;"> </p> <p><b>Earth in Space</b></p>	<p><b>Chemistry</b> Materials &amp; Properties</p> <p><b>The study of the composition, behaviour and properties of matter.</b></p>	<p><b>Biology</b> Animals including Humans</p> <p><b>The study of living things, including: Types of animals, Food animals eat, Senses, Reproduction, Basic needs, Diet and exercise for humans.</b></p>	<p><b>Biology</b> Living Things &amp; their Habitats</p> <p><b>The study of living things, including: Characteristics of living things, Relationship of living things and their environment.</b></p>	<p><b>Biology</b> Plants</p> <p><b>The study of living things, including: Common plants and trees in a local environment. Growth, Health, Relationship of living things and their environment.</b></p>	
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Phase 3 / 4	<p><b>Physics</b> Forces &amp; Magnets</p> <p><b>The study of energy forces, mechanics, waves, structure of atoms, physical universe</b></p> <p style="text-align: center;"> </p> <p><b>Earth in Space</b></p>	<p><b>Chemistry</b> Rocks States of Matter</p> <p><b>The study of the composition, behaviour and properties of matter.</b></p>	<p><b>Biology</b> Animals including Humans</p> <p><b>The study of living Amount and type of nutrition, Structure of humans and animals, Structure of digestive system, Function of digestive system, Relationship of food chains.</b></p>	<p><b>Biology</b> Living Things &amp; their Habitats</p> <p><b>The study of living things, including: Grouping, Classification, Environmental change and impact.</b></p>	<p><b>Biology</b> Plants</p> <p><b>The study of living things, including: Structure and function, Food and survival, Life systems Reproduction.</b></p>	<p><b>Physics</b> Electricity Light Sound</p> <p><b>The study of energy forces, mechanics, waves, structure of atoms, physical universe.</b></p> <p style="text-align: center;"> </p> <p><b>Earth in Space</b></p>
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Phase 5 / 6	<p><b>Physics</b> Forces</p> <p><b>Matter Forces and motion Sound, light and waves, Electricity and magnetism.</b></p> <p style="text-align: center;"> </p> <p><b>Earth in Space</b></p>	<p><b>Chemistry</b> Properties &amp; Changes of Materials</p> <p><b>The study of the composition, behaviour and properties of matter.</b></p>	<p><b>Biology</b> Animals including Humans</p> <p><b>The study of living things: Lifespan and life cycle, Change and growth, Structure and function of the circulatory system, Health and exercise.</b></p>	<p><b>Biology</b> Living Things &amp; their Habitats</p> <p><b>The study of living things, including Structure, Order Life cycles, Reproduction, Pioneering scientists, Classification.</b></p>	<p><b>Biology</b> Evolution &amp; Inheritance</p> <p><b>The study of living things: Change, Evolution, Adaption, Environment.</b></p>	<p><b>Physics</b> Electricity Light sound</p> <p><b>Matter, Forces and motion. Sound, light and waves. Electricity and magnetism.</b></p> <p><b>The study of energy forces, mechanics waves, structure of atoms, physical universe.</b></p> <p style="text-align: center;"> </p> <p><b>Earth in Space</b></p>
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## GCSE Concepts

### Biology-substantive concepts

- 1. Cell biology
- 2. Organisation
- 3. Infection and response
- 4. Bioenergetics
- 5. Homeostasis and response
- 6. Inheritance, variation and evolution
- 7. Ecology

### Chemistry-substantive concepts

- 1. Atomic structure and the periodic table
- 2. Bonding, structure, and the properties of matter
- 3. Quantitative chemistry
- 4. Chemical changes
- 5. Energy changes
- 6. The rate and extent of chemical change
- 7. Organic chemistry
- 8. Chemical analysis
- 9. Chemistry of the atmosphere
- 10. Using resources

### Physics-substantive concepts

- 1. Energy
- 2. Electricity
- 3. Particle model of matter
- 4. Atomic structure
- 5. Forces
- 6. Waves
- 7. Magnetism and electromagnetism
- 8. Space physics (physics only)