



Science Overview - Year 5



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Term 1	<p>Science: Earth & Space</p> <p>Lesson 1: Spherical Bodies</p> <p>LO: To explain why we know the Sun, Earth and Moon are spherical identify scientific evidence which does or does not provide evidence for an idea or argument. Y5-6:Sc:WS6, Y5:Sc:ES3 Processes (Phenomena) Investigation (Questioning)</p>	<p>Science: Earth & Space</p> <p>Lesson 2: The Planets</p> <p>LO: To name and describe features of the planets in our solar system and order the planets in our solar system. Y5:Sc:ES1 Processes (Earth, Phenomena) Investigation (Questioning)</p>	<p>Science: Earth & Space</p> <p>Lesson 3: Geocentric Versus Heliocentric</p> <p>LO: To explain how planets move in our solar system and identify scientific evidence which does or does not provide evidence for an idea or argument. Y5-6:Sc:WS5, Y5-6:Sc:WS6, Y5:Sc:ES1 Investigation (Report & conclude, Questioning) Creativity (Report & conclude) Processes (Earth, Phenomena)</p>	<p>Science: Earth & Space</p> <p>Lesson 4: Night and Day</p> <p>LO: To explain day and night and the apparent movement of the sun across the sky and identify scientific evidence which does or does not provide evidence for an idea or argument. Y5-6:Sc:WS6, Y5:Sc:ES4 Investigation (Questioning) Processes (Earth, Pattern seeking, Phenomena)</p>	<p>Science: Earth & Space</p> <p>Lesson 5: Night and Day International</p> <p>LO: To investigate night and day in different parts of the Earth and report and present findings from enquiries. Y5-6:Sc:WS5, Y5:Sc:ES4 Investigation (Report & conclude, Questioning) Creativity (Report & conclude) Processes (Earth, Pattern seeking, Phenomena)</p>	<p>Science: Earth & Space</p> <p>Lesson 6: Movement of the Moon</p> <p>LO: To explain the movement of the Moon Y5-6:Sc:WS5, Y5:Sc:ES2 Investigation (Report & conclude, Questioning) Creativity (Report & conclude) Processes (Earth, Phenomena)</p>
Term 2	<p>Science: Forces</p> <p>Lesson 1: Fabulous Forces</p> <p>LO: To identify forces acting on objects. Y5:Sc: F1, Y5:Sc: F2</p>	<p>Science: Forces</p> <p>Lesson 2: Gravity</p> <p>LO: To explore the effect gravity has on objects and how gravity was discovered.</p>	<p>Science: Forces</p> <p>Lesson 3: Air Resistance</p> <p>LO: To investigate the effects of air resistance. Y5:Sc: F2, Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS3, Y5-6:Sc:WS5, Y5-6:Sc:WS6</p>	<p>Science: Forces</p> <p>Lesson 4: Water Resistance</p> <p>LO: To explore the effects of water resistance. Y5:Sc: F2, Y5-6:Sc:WS2, Y5-6:Sc:WS5</p>	<p>Science: Forces</p> <p>Lesson 5: Friction</p> <p>LO: To investigate the effects of friction. Y5:Sc: F2, Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS3, Y5-6:Sc:WS5</p>	<p>Science: Forces</p> <p>Lesson 6: Marvellous Mechanisms</p> <p>LO: To explore and design mechanisms. Y5:Sc: F3</p>



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	Big Idea (Aspect): Processes (Forces) Investigation (Questioning)	Y5:Sc: F1, Y5-6:Sc:WS2, Y5-6:Sc:WS3, Y5-6:Sc:WS5, Y5-6:Sc:WS6 Big Idea (Aspect): Processes (Forces) Investigation (Questioning, Measurement, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)	Big Idea (Aspect): Comparison (Phenomena) Investigation (Questioning, Measurement, Report & conclude) Creativity (Report & conclude)	Big Idea (Aspect): Comparison (Phenomena) Investigation (Questioning, Measurement, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)	Big Idea (Aspect): Comparison (Phenomena) Investigation (Questioning, Measurement, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)	Big Idea (Aspect): Processes (Modelling) Investigation (Observations)
Term 3	Science: Properties & changes of Materials. Lesson 1: Properties of Materials L.O. To compare materials according to their properties. Y5:Sc:PCM1, Y5:Sc:PCM4, Y5-6:Sc:WS2 Big Idea (Aspect): Materials (Identification and Classification)	Science: Properties & changes of Materials. Lesson 2: Keeping Cool L.O. To investigate thermal conductors and insulators. Y5:Sc: PCM4, Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS3, Y5-6:Sc:WS5 Big Idea (Aspect): Materials (Identification and Classification, Identification and Classification)	Science: Properties & changes of Materials. Lesson 3: Brighter Bulbs L.O. To investigate which electrical conductors make a bulb shine brightest. Y5:Sc: PCM4, Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS3, Y5-6:Sc:WS5 Big Idea (Aspect): Materials (Identification and Classification) Processes (Modelling, Forces)	Science: Properties & changes of Materials. Lesson 4: Disappearing or Dissolving? L.O. To investigate materials which will dissolve. Y5:Sc:PCM2, Y5:Sc: PCM5, Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS3 Big Idea (Aspect): Materials (Identification and Classification) Humankind (Staying safe)	Science: Properties & changes of Materials. Lesson 5: Separating Mixtures L.O. To use different processes to separate mixtures of materials. Y5:Sc:PCM2, Y5:Sc:PCM3, Y5:Sc: PCM5 Big Idea (Aspect): Materials (Identification and Classification, Properties and Uses)	Science: Properties & changes of Materials. Lesson 6: Irreversible Changes L.O. To identify and explain irreversible chemical changes. Y5:Sc: PCM6 Big Idea (Aspect): Materials (Identification and Classification, Properties and Uses) Humankind (Staying safe)



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	Investigation (Questioning, Measurement)	Processes (Modelling) Investigation (Investigation, Questioning, Measurement, Observations, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)	Comparison (Phenomena) Investigation (Investigation, Questioning, Measurement, Observations, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)	Investigation (Investigation, Questioning, Measurement, Observations, Gather & record data) Creativity (Gather & record data)	Humankind (Staying safe) Investigation (Questioning, Observations)	Investigation (Questioning, Observations)
Term 4	<p>Science: Living things & their habitats</p> <p>Lesson 1: Making New Plants 1</p> <p>LO: To describe how some plants reproduce. Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Nature (Identification & classification, Identification & classification, parts & functions, parts & functions, Survival) Investigation (Questioning)</p>	<p>Science: Living things & their habitats</p> <p>Lesson 2: Making New Plants 2</p> <p>LO: To describe how some plants reproduce Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Nature (Identification & classification, Identification & classification, parts & functions, parts & functions, Survival) Investigation (Questioning)</p>	<p>Science: Living things & their habitats</p> <p>Lesson 3: Mammals</p> <p>LO: To describe the life cycles of different mammals. Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Nature (Identification & classification, Identification & classification) Creativity (Gather & record data) Investigation (Gather & record data, Questioning)</p>	<p>Science: Living things & their habitats</p> <p>Lesson 4: Jane Goodall</p> <p>LO: To explain what Jane Goodall discovered about chimpanzees. Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Significance (Significant People) Nature (Identification & classification, Identification & classification) Place (Habitats) Comparison(Physical things)</p>	<p>Science: Living things & their habitats</p> <p>Lesson 5: Metamorphosis</p> <p>LO: To compare the life cycles of amphibians and insects. Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Nature (Identification & classification, Identification & classification) Creativity (Gather & record data) Investigation (Gather & record data, Questioning)</p>	<p>Science: Living things & their habitats</p> <p>Lesson 6: Comparing Life Cycles</p> <p>LO: To compare the life cycles of plants, mammals, amphibians, insects and birds. Y5:Sc: LT1, Y5:Sc: LT2</p> <p>Big Idea (Aspect): Nature (Identification & classification, Identification & classification) Creativity (Gather & record data) Investigation (Gather & record data, Questioning)</p>



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Term 5	<p>Science: Animals including humans</p> <p>Lesson 1: Humans Timeline</p> <p>L.O. To describe the stages of human development. Y5:Sc:A1</p> <p>Big Idea (Aspect): Humankind (Human body) Investigation (Questioning)</p>	<p>Science: Animals including humans</p> <p>Lesson 2: Growth of Babies</p> <p>L.O. To explain how babies grow and develop and present data. Y5-6:Sc:WS3, Y5-6:Sc:WS5, Y5:Sc:A1</p> <p>Big Idea (Aspect): Humankind (Human body) Investigation (Questioning, Report & conclude, Gather & record data) Creativity (Report & conclude, Gather & record data)</p>	<p>Science: Animals including humans</p> <p>Lesson 3: Puberty</p> <p>L.O. To describe and explain the main changes that occur during puberty. Y5:Sc:A1</p> <p>Big Idea (Aspect): Humankind (Human body) Investigation (Questioning)</p>	<p>Science: Animals including humans</p> <p>Lesson 4: Changes in Old Age</p> <p>L.O. To identify the changes that take place in old age. Y5:Sc:A1</p> <p>Big Idea (Aspect): Humankind (Human body) Investigation (Questioning)</p>	<p>Science: Animals including humans</p> <p>Lesson 5: Gestation Periods</p> <p>L.O. To report findings from enquiries. Y5-6:Sc:WS3, Y5-6:Sc:WS5, Y5:Sc:A1</p> <p>Big Idea (Aspect): Humankind (Human body) Investigation (Questioning, Report & conclude, Gather & record data) Creativity (Report & conclude)</p>	<p>Science: Animals including humans</p> <p>Lesson 6: Life Expectancy</p> <p>L.O. To record complex data using graphs and models and identify the relationship between variables. Y5-6:Sc:WS5</p> <p>Big Idea (Aspect): Investigation (Questioning, Report & conclude, Investigation) Creativity (Report & conclude, Gather & record data)</p>



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Term 6	Science: Scientists and inventors	Science: Scientists and inventors	Science: Scientists and inventors	Science: Scientists and inventors	Science: Scientists and inventors	Science: Scientists and inventors
	Lesson 1: David Attenborough	Lesson 2: CSI	Lesson 3: Mission to the Moon	Lesson 4: The Solar System	Lesson 5: Eva Crane	Lesson 7: Leonardo Da Vinci
	L.O. To describe the life and work of David Attenborough. (NON-STATUTARY NC)	L.O. To describe how evidence is used to solve crimes and use chromatography to separate mixtures.	L.O. To describe Margaret Hamilton's life and work. (NON-STATUTARY NC)	L.O. To explore the sizes, surfaces and orbits of planets in our solar system.	L.O. To describe Eva Crane and her work with bees.	L.O. To carry out an inquiry to answer a question and use my results to make new predictions.
	Big Idea (Aspect): Significance (Significant People) Place (Habitats)	Y5:Sc: PCM3, Y5-6:Sc:WS6 Big Idea (Aspect): Materials (Properties and Uses, Identification and Classification) Significance (Significant Events)	Big Idea (Aspect): Significance (Significant Events, Significant People)	Y5:Sc:ES1 Big Idea (Aspect): Significance (Significant People) Processes (Earth, Phenomena)	Y5:Sc: LT1 Big Idea (Aspect): Nature (Identification & classification, Identification & classification) Significance (Significant People)	Y5-6:Sc:WS1, Y5-6:Sc:WS2, Y5-6:Sc:WS4 Big Idea (Aspect): Investigation (Investigation, Measurement, Report & conclude) Creativity (Report & conclude) Significance (Significant People)
					Lesson 6: Stephanie Kwolek	Lesson 8: Stonehenge
					L.O. To describe Stephanie Kwolek and her work with materials and choose materials for jobs based on their properties.	L.O. To identify evidence that supports or refutes scientific theories about Stonehenge.
					Y5:Sc:PCM1, Y5-6:Sc:WS5,	Y5-6:Sc:WS6



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					Big Idea (Aspect): Materials (Identification and Classification) Creativity (Report & conclude) Investigation (Report & conclude) Significance (Significant People)	Big Idea (Aspect): Processes (Changes)