Beehive Preparatory School Science Curriculum Overview
2026-2027

Year Groups	IDENTITY		EQUALITY		SUSTAINABILITY	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	**All about us- Hygiene:** -Explore what hygiene is. -Understand why we wash our hands	**Light and Dark:** -Explore night and day -Identify the sun and moon	**Under the Sea:** -Explore the animals th at live under the sea -Naming animals that live under the sea Animals -Identify a range of animals and understand that they have different habitats		**Life cycle of a chick: (**Class pet) -Describe what is happening day by day -Make predictions	
Reception	**All about me-body parts:** -Identify key body parts and bones -Explore what body parts we use for certain activities and why -Look after ourselves -Look at the effects of exercise and healthy eating on the body		**Season and changes:** -Describe the season and weather associated with it -Observe how animals behave differently in different seasons	**Growing and changing:** -Sequence life cycles - Humans/Butterfly -Explain the processes	**Habitats:** - Understand that animals have different habitats and why -Identify animals and matching them to their habitats	**Scientific Enquiry:** -Conduct scientific experiments and make predictions on topics such as melting/floating and sinking
Pre-Prep **Cycle A**	**Biology: The Human Body:** -Identify and name parts of the human body -Draw and label parts of the human body -Identify the 5 senses **Biology: Seasonal Change:** -Describe changes in autumn -Collect and record data	**Chemistry: Materials:** -Explore materials: -Identify objects and materials -Imvestigate melt and freeze/float or sink? **Biology: Seasonal Change:** -Identify changes in winter -Gather and record data	**Biology: Planting (A):** -Explore and identify winter plants -Explore and identify animals -Compare and group animals **Biology: Animals:** -Identify mammals -Identify birds -Identify fish	**Sustainability: Caring for the Planet:** -Explain the importance of caring for our planet -Identify ways that we can care for the planet **Biology: Seasonal Change: (Spring)** Planting (B)-Observe and record changes -Identify Spring plants	**Biology: Plants:** -Identify parts of plants and trees -Identify the difference between wild and garden plants -Investigate plants in my local area -Identify deciduous and evergreen trees -Identify Summer plants **Biology: Planting:**(C) -Observe and record changes -Discuss seasonal changes	**Sustainability: Growing and Cooking:** -Investigate where food come from -Observe, record and explain changes in the plants we have planted this year **Biology: Seasonal Changes:** -Explain changes in Summer -Collect and record data -Identify the main changes in each season
Cycle B	**Biology: Animals' needs for survival:** -Investigate what animals need for survival -Explore whether all animals have the same needs -Identify what is the same and what is different **Biology: Humans:** -Explore how we can look after ourselves	**Chemistry: Materials:** -Identify what materials are -Investigate whether the same object can be made of different materials -Explore how to test materials -Plan and investigate a waterproof experiment **Sustainability: Plastic:** -Investigate how plastic is helpful/harmful -Explore how we can reduce plastic waste in school	**Biology: Plants (light and dark):** -Identify the plant parts -Investigate what plants need to grow -Investigate whether plants can grow in the dark -Investigate - light and dark	**Biology: Living things and their habitats:** -Identify what different habitats exist -Explain what a microhabitat is -Explore how habitat and diet are related -Explain what a food chain is -Living, dead or never alive? Plants (light and dark): -Analyze what our investigation revealed	**Biology: Plants (light and dark):** -Investigate what plants need to grow -Observe differences (light and dark) **Biology: Growing up:** -Explain what offspring is -Identify the stages - human life cycle -Explore whether all life cycles are the same -Identify stages - amphibians -Investigate patterns	**Biology: Growing up:** -Identify the stages - butterfly -Explore how the lifecycles of a butterfly and amphibian are similar/different **Sustainability: Wildlife:** -Explore what wildlife does for us -Investigate what we can do for wildlife
Prep **Cycle A**	**Biology: Skeletons:** -Investigate how many bones are in the human skeleton -Explain the functions of a skeleton -Identify what all the different bones are called -Investigate whether all animals have a spine -Explore whether all skeletons are the same **Biology: Movement:** -Explain what joints are -Investigate how we move	**Biology: Nutrition and diet:** -Identify the different food groups -Explain what a balanced diet is -Investigate whether all animals have the same diets **Sustainability: Food waste:** -Explain what food waste is -Investigate how we can reduce food waste **Chemistry: Rocks:** -Explore how we can identify rocks -Investigate how we can group them -Explore how to test rocks -Identify what types of rocks we can find locally	**Chemistry: Fossils:** -Explain what fossils are -Investigate what information we get from fossils Soils: -Explain what soils are -Investigate why soil is important -Plan, investigate and evaluate a soil experiment **Chemistry: Soils:** -Explore soil -Investigate the importance of soil -Plan/investigate and evaluate a soil experiment	**Physics: Light:** -Identify what light sources are -Investigate what we know about the sun -Investigate how we see -Explain how shadows are formed Opaque, translucent or transparent? -Plan, investigate and evaluate a shadow experiment	**Biology: Plants (A):** -Identify the parts of a plant and their functions -Plant dissection -Investigate how plants grow -Investigate how a stem transports water -Explain what seeds are -Explain what pollination is -Investigate how seeds are dispersed -Explore the life cycle of a plant **Sustainability: Biodiversity:** -Explain what biodiversity is -Investigate how we can increase biodiversity in our local area	**Physics: Forces:** -Explain what forces are -Explain what friction is -Plan, investigate and evaluate a friction experiment. **Physics: Magnets:** -Explain what magnets are -Which materials are magnetic and which ones are non-magnetic? -Investigate metals -North and South Poles - attract or repel? **Biology: Plants (B):** -Observe whether our plants grew -Examine our findings

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Cycle B	**Biology:** Group and Classify Living things: -Explore how to group animals -Explain what vertebrates and invertebrates are -Explain what a classification key is -Explore how to group plants **Biology:** Data Collection (A): -Explore how and why we collect data -Explore how to analyze data	**Chemistry:** States of matter: -Identify what solids, liquids and gases are -Investigate how they change states -Explore how to use equipment for testing -Plan, investigate and evaluate a melting experiment -Plan, investigate and evaluate an evaporation experiment	**Physics:** Sound: -Explain what vibrations are -Investigate how our ears work -Explore how to investigate sound -Explain what volume is -Explain what pitch is -Plan, investigate and evaluate a volume experiment. **Biology:** Data Collection (B): -Explore how and why we collect data -Explore how to analyze data	**Physics:** Electricity: -Identify what appliances use electricity -Explore how to build and draw circuits -Investigate what has gone wrong -Investigate conductors and isolators -Explain what conductivity is within a circuit **Sustainability:** Energy: -Explain what energy is -Investigate how we can reduce energy usage	**Biology:** Data Collection (C): -Explore how and why we collect data -Explore how to analyze data -Explain my conclusion **Biology:** Habitats: -Explain what habitats are -Explain what a classification key is -Investigate the human impact on habitats **Sustainability:** Deforestation: -Explain what deforestation is -Investigate the impacts in the UK and the rest of the world -Investigate the impacts in the UK and the rest of the world	**Biology:** The digestive system: -Identify what is the same and what is different (Teeth - Carnivore, herbivore,omnivore) -Investigate what human teeth look like -Identify the layers of teeth -Plan - tooth decay experiment -Explain what the digestive system is -Explore what the human digestive system looks like -Findings - tooth decay experiment **Biology:** Food chains: -Explain what a food chain is -Explore how to interpret food chains -Investigate how to draw a food chain -Investigate the benefit to animals/plants/humans of reducing the effect of human activity on habitats
Senior Prep **Cycle A**	**Physics:** Forces: -Explain what friction is -Explain what air resistance is -Plan, investigate and evaluate a parachute experiment -Plan, investigate and evaluate a water resistant experiment -Explain what gravity is -Investigate how we can use small forces for greater effect	**Physics:** Space: -Explore what the Solar System is -Explain what planets are -Investigate how the Earth and other planets move -Explore how ideas about the Solar System change over time -Explore what makes planet Earth so special -Explain how day and night happen -Explain what a satellite is **Sustainability:** Global warming: -Explain what global warming is Investigate the impacts of global warming on living things	**Chemistry:** Properties of materials: -Test materials- magnetic, transparency and hardness -Which materials conduct electricity? -Plan, investigate and evaluate an insulating heat experiment -Explore the use of everyday materials **Biology:** Animals including humans: -Explore the human life cycle -Babies, toddlers,children, teenagers, adults and elderly	**Biology:** Animals including humans: -Gestation periods of mammals -Gestation periods and lifespan **Biology:** Life cycles: -Explore the life cycle of a mammal -Explore the life cycle of amphibians -Explore the life cycle of insects -Explore the life cycle of birds	**Biology:** Reproduction in plants (A): -Identify the reproductive parts in a plant -Explain what pollination is -Explain what plant cloning is -Plan - cloning plants **Chemistry:** Reversible and irreversible changes: -Explain what dissolving is -Investigate how we can separate materials -Explain what evaporation is -Explain what reversible changes are -What are irreversible changes? (burning) -What are irreversible changes? (acid)	**Sustainability:** Plastic pollution: -Explain what plastic pollution is -Investigate the impacts of plastic pollution on the planet -Explore how we can prevent plastic pollution **Biology:** Reproduction in plants (B): -What did we find out? (Cloning plants investigation) -Investigate how to interpret the data -Analyze what it shows us
Cycle B	**Biology:** Living things and their habitats -Explore conditions for life -Identify and group organisms -Classify animals -Classify plants -Investigate and classify microorganisms -Learn about the work of Carl Linnaeus and his system of classifying organisms	**Physics:** Electricity -Construct and draw series circuits using symbols -Identify complete and incomplete circuits -Investigate variations within circuits -Plan, investigate and evaluate a voltage experiment **Sustainability:** Renewable energy -Identify what renewable energy is -Investigate how to use renewable energy	**Physics:** Light -Investigate how we see -Investigate light and straight lines -Identify shadow formation -Plan, investigate and evaluate a shadow experiment -Investigate refraction -Explore light **Sustainability:** Light pollution -Identify what light pollution is -Explore how we can reduce light pollution	**Biology:** The circulatory system -Identify the circulatory system -Investigate the composition of blood -Explore other functions carried out by blood -Identify blood flow in the heart -Identify oxygenated and deoxygenated blood -Explore the function of the heart **Biology:** Diet and lifestyle -Investigate different diets -Explore the effects of unhealthy life styles -Plan, investigate and evaluate a heart rate experiment	**Biology:** Variation -Explore the term ‘species’ -Investigate inheritance and characteristics **Biology:** Adaptation -Explore animal adaptations -Explore plant adaptations -Investigate natural selection **Biology:** Fossils -Investigate fossil formation -Explore fossils -Learn about Mary Anning	**Themed projects:** Melting points -Plan, investigate and evaluate melting points Thermal insulation -Plan, investigate and evaluate thermal insulation