Clore Shalom School
Science Curriculum Map

EYFS	**Autumn Term:** Similarities and differences between families, family customs and routines, houses and homes. Senses, bodies. **Recycling activities** **Communication and Language:** • Learn and use new vocabulary. • Ask questions to investigate • Articulate their ideas • Describe events in some detail. • Work out problems and organise thinking and activities • Explain how things work and why they might happen. **Personal, Social and Emotional Development:** Know and talk about the different factors that support their overall health and wellbeing. **Making waterproof clothing for Teddy Bears** **Using microscope to look at leaves and patterns** **Communication and Language:** • Learn and use new vocabulary. • Ask questions to investigate • Articulate their ideas • Describe events in some detail. • Work out problems and organise thinking and activities **Understanding the World:** Changes in the natural world.		**Spring term:** Going on an environmental walk **Understanding the World:** • Explore the natural world • Describe senses • Recognise different environments • Changes in the natural world. • Making observations and drawings. **Communication and Language:** • Ask questions to investigate • Articulate their ideas **Personal, Social and Emotional Development:** Know and talk about the different factors that support their overall health and wellbeing.		**Summer Term:** Lifecycles Mini beast hunting **Understanding the World:** • Explore the natural world • Describe senses • Recognise different environments • Changes in the natural world. **Communication and Language:** • Articulate their ideas • Know and talk about the different factors that support their overall health and wellbeing. Making observations and drawings.	
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 1	**Seasonal Changes** Learn about the four seasons and weather associated with each.	**Everyday Materials** Identify the difference between objects and materials.	**Sensitive Bodies** Familiarise with basic functions of the human body.	**Comparing Animals** Recognize common characteristics and physical features.	**Introduction to Plants** Identify and name a variety of common wild and garden plants.	**Making connections** Broaden understanding of plants and animals

Clore Shalom School
Science Curriculum Map

	How do seasonal changes affect trees, daylight hours and clothes choices. Plan and carry out a weather report.	Explore surroundings to find examples of each. Plan tests, make observations and record data.	Investigate the senses. Make observations, spot patterns and use data to answer questions. Develop understanding of how science can support those who have lost sensory function and consider how firefighters use their senses at work.	Make comparisons and classify animals. Effective ways to collect data about class pets. Develop understanding of classification.	Observe and name plant parts and draw and label diagrams of flowers. Observe leaves and sort into groups. Measure leaf length and record observations. Investigate if beans need water.	through picture books and outside activities. Gather and record data. Identify animals by observing footprints. Sort birds according to their diet and seek patterns in physical characteristics.
Year 2	**Habitats** What life processes all living things have in common. Classify objects into alive, once alive, or never been alive. Explore global habitats Learn how a range of living things depend on each other for food or shelter. Create food chains.	**Microhabitats** Learn about the skills scientists use to answer questions. Discover how microhabitats provide what minibeasts need to survive. Carry out a survey of minibeasts in the school grounds. Explore the job role of a botanist.	**Uses of everyday materials** Recognise that materials are suited to specific purposes. Compare suitability of materials, gather and record data in tables and graphs. Learn about the harmful effects of plastic and explore eco-friendly alternatives.	**Life cycles and health** Learn what animals need to survive and how they change over time. Collect data to observe changes in peers. Consider how scientific knowledge helps people to make healthy choices.	**Plant growth** Identify conditions needed to seed germination and compare to the survival needs of plants in later growth phases. Identify the stages in a plant's cycle Discover how humans impact plants in the environment	**Plant based materials** Identify ways to reduce, reuse and recycle. Discover how some natural materials are derived from plants and look at the processes involved in making paper. Conduct simple tests to choose the most suitable material for homemade plant pots.
Year 3	**Movement and Nutrition** Identify key bones in the human skeleton and compare them to other animals explaining the role within the body. Explore how changes in muscles result in movement and the implication these discoveries have in the	**Forces and Muscles** Investigate the movements of vehicles on different surfaces Learn about the impact of friction and compare uses and drawbacks Explore the properties and uses of different magnets	**Rocks and Soil** Study rocks and their properties, classify rocks and identify how they were formed. Look at the work of palaeontologists to learn about fossil formation and use models to explore how fossils tell us about the past. Explore soil formation	**Light and Shadows** Identify examples of light sources Investigate reflection and shadow formation Explore how shadows can be used to entertain in the arts	**Plant Reproduction** Describe the functions of named parts and use evidence to explain their significance in plant development. Investigate factors that may affect plant growth and how water is transported.	**Does hand span affect grip strength?** Experimenting, analysing data and drawing conclusions to explore the relationships between hand span and grip strength.

	scientific development of prosthetic limbs. How energy is used by the body What constitutes a balanced diet					
Year 4	**Digestion and Food** Describe the function of key organs in the digestive system. Identify the types of human teeth Investigate factors that impact our dental health. Compare human teeth to animals	**Electricity and Circuits** Exploring appliances that use electricity in school. Learn how to work with electricity safely and build circuits. Investigate electrical conductors and insulators. Explore the relationship between the number of bulbs and bulb brightness.	**States of Matter** Investigate the properties of solids, liquids and gases. Learn about different states of matter. Explore changes of state using relatable examples and use this to explain changes to water through the water cycle.	**Sound and Vibrations** Explore different ways of producing sounds. Learn about the relationship between vibrations and what they hear. Study dolphins and whales to develop understanding of how sound travels between objects and investigate the role of insulation to protect our ears.	**Classification and changing habitats** Identifying different ways to group living things. Study how habitats change over time and understand that humans can have both positive and negative effects on their surroundings.	**How does the flow of liquids compare?** Children consider methods for measuring how liquids flow differently from eachother. Plan and execute an enquiry.
Year 5	**Mixtures and Separation** Explore different types of mixtures and the different methods that can be used to separate them. Dissolve a range of substances, identify different solutions, investigate how temperature affects the time taken to dissolve.	**Properties and Changes** Investigate hardness, transparency, and conductivity and consider how these properties influence the uses of materials. Explore reversible changes, including dissolving and change of state.	**Earth and Space** Learn the key celestial bodies in our solar system and compare their movements. Discover the relationship between the Earth's rotation and daylight.	**Life cycles and reproduction** Learn about the significance of reproduction for a species's survival. Compare asexual and sexual reproduction in plants. Compare the life cycles of mammals, birds, amphibians and insects, identifying key differences.	**Unbalanced Forces** Explore gravity air resistance and water resistance. Consider the effect of these forces being unbalanced.	**Human timeline** Study human development and changes, identify key stages and consider what data may help determine if a child is growing normally. Describe how puberty affects boys and girls. **Does the size of an asteroid affect the size of the impact crater?** Explore the relationship between the size of model asteroids and the size of the impact crater they create.

Clore Shalom School
Science Curriculum Map

Year 6	**Classifying Big and Small** Broaden knowledge of how vertebrates, invertebrates, plants and micro organisms are grouped using shared characteristics. Discover how Carl Linneaus developed the Linnaean and binomial systems for classifying and naming living things.	**Light and Reflection** Proving that light travels in a straight line, using this information to explain observations of reflection and shadows. Explore how our eyes allow us to see and how mirrors can be used in a variety of ways. Investigate factors affecting the size of shadows and the laws of reflection.	**Evolution and Inheritance** Learn about characteristics that are inherited from parents and those that are environmental. Learn how observations lead to theories and explore natural selection.	**Circuits, Batteries and Switches** Learn to draw conventional circuit diagrams and use models to explain current, resistance and voltage. Compare different batteries and consider the effect on bulb brightness.	**Circulation and Health** Learn about the role of the heart, blood and blood vessels and use models to demonstrate their function. Explore how lifestyle choices affect our health.	**Are some sunglasses safer than others?** Investigate the efficiency of different sunglasses. Devise enquiries to test light an UV transmission of the lenses to form a conclusion about which sunglasses are best.