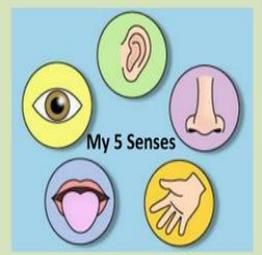
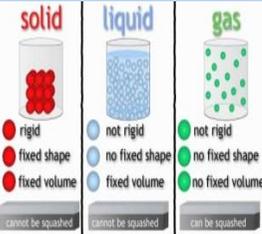
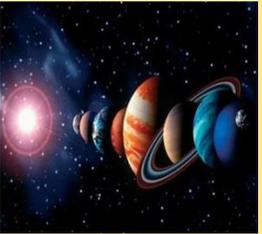
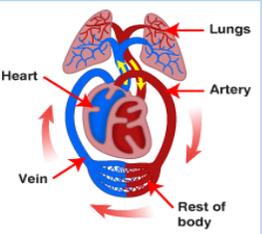
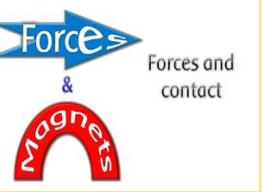
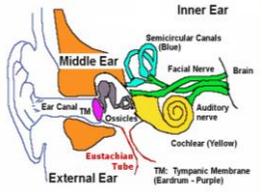




Khalsa Primary School Science Overview



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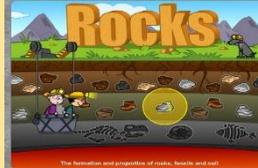
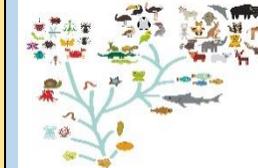
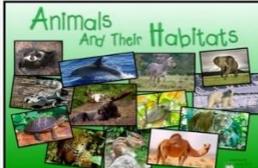
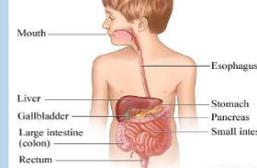
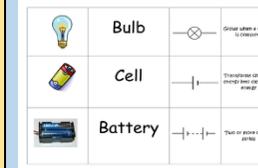
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Biology Using Our Senses Introducing our children to their senses and how they will help them explore and investigate the world that they live in. 	Chemistry Materials: Shaping Up Our children will investigate the different properties of materials and explore how these properties can be put to use. 	Biology Amazing Bodies A series of investigations that will examine what our bodies need to survive and how to incorporate a healthy lifestyle so we are the best we can be! 	Chemistry In a State! Our children will investigate the states of matter of materials so that they have an understanding how it impacts the material and hence its use. 	Physics The Earth and Beyond Introducing our children to the universe outside of our wonderful planet and to explore all the planets in our solar system. 	Biology Body Pump Exploring the structure and hence the functions of the human body's internal circulatory systems to gain an understanding of how to keep them healthy. 
	Chemistry Everyday Materials: Part 1 This chemistry based unit of work introduces our children to a range of basic materials and their properties. They will learn to name and identify a variety of materials. 	Chemistry Materials: Good Choices Our children will build on learning from Year 1 about different materials and their properties. They will enhance their understanding that an object is made from different materials Materials and their Properties 	Physics The Power Of Forces During this physics topic, our children will explore how forces can make objects start to move, speed up, slow down or change direction. 	Physics Good Vibrations Our children will develop their vocabulary for describing sounds. They will learn that sounds are made by these vibrations that travel through a medium to the ear. 	Biology Reproduction In Plants In this biological unit, our children will learn about reproduction in some types of plants and animals. When working scientifically, the children carry out observations of flowering plants. 	Biology Body Health In this unit our children will learn how to keep their bodies healthy. The focus is on lifestyle choices that humans make, including diet and exercise. 
Autumn 2						



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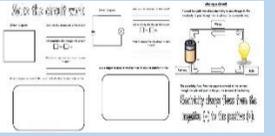
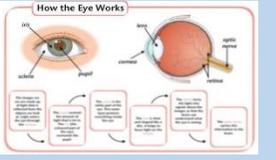
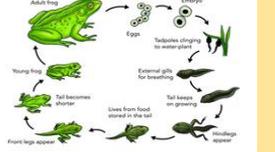
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Spring 1	<p>Chemistry Everyday Materials: Part 2 During this chemistry based unit of work, our children will continue to review the properties of different materials. When working scientifically there is a strong emphasis throughout the unit on our children using their senses to observe closely.</p> <p>The objects around you are made of many different materials.</p> 	<p>Biology Take Care During this unit of work, our children will begin to learn about different ways to keep themselves healthy. They will then consider the importance of eating a range of different types of food. This is developed further in Year 3, unit of work: Amazing Bodies.</p> 	<p>Chemistry Rocks and Soils During the chemistry topic our children will be working as 'Rock Detectives' establishing their core knowledge and understanding of rocks and soils and how fossils have formed over time. They will name rocks and comparing their observable properties.</p> 	<p>Biology Who Am I? In this biological unit, our children will further develop their understanding of keys gained in the Year 3 rocks unit, to identify animals from a range of habitats. They will construct keys, asking yes/no questions about the characteristic differences between the animals.</p> 	<p>Chemistry Get Sorted In this chemistry based unit of work, our children will identify, compare and classify a variety of materials according to both their properties and their uses. They will begin to recognise that a single material name, like 'metal' or 'plastic' can describe a considerable number of different materials.</p> 	<p>Biology Everything Changes In this challenging unit, our children build on their knowledge of living things and how they are adapted to particular environments. They will be introduced to the idea that variation in organisms results in the species becoming better adapted and that the process of natural selection.</p> 
Spring 2	<p>Biology Looking At Animals In this unit, our children will identify and name, look closely at and compare and contrast many different animals. They name their body parts, describe their physical features and mimic how they move. They are reminded that animals need to eat in order to be healthy and that they eat lots of different types of foods.</p> 	<p>Biology What's in Your Habitat? In this unit, our children will begin to learn about different habitats, how the living things are suited to the habitat and the interactions between the living organisms within a habitat. They will also explore the habitat by identifying things that are living, once-lived and never-lived.</p> 	<p>Biology Our Changing World In this unit of work, our children will observe plants at different times of the year. They will observe how the leaves on trees change greatly through the year. They will observe the variety of flying insects and grow plants to produce seed heads as a complete growth cycle.</p> 	<p>Biology Where Does All The Food Go? During this unit, our children will learn about the human digestive system and will be introduced to the organs associated with digestion. They will learn that the digestive system breaks down food so that the nutrients and energy is used by the body.</p> 	<p>Chemistry Marvellous Mixtures In this unit, our children will further develop their conceptual knowledge of how different mixtures of solids and liquids might be separated. They learn that certain solids dissolve while others do not, and how these dissolved solids might be retrieved from a mixture. They explore how the rate at which solids dissolve can vary.</p> 	<p>Physics Danger! Low Voltage Electricity During this unit, our children will build on their electricity work from Year 4. They will construct circuits with an increasing number of components and contrast the effects this has on their function. They will review the flow of electricity through a basic circuit and through other components.</p> 



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	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Summer 1	Biology Plant Detectives During this unit, our children will be introduced to a wide variety of plants which can be found in their immediate environment. The emphasis will be the children exploring and investigating what is familiar and that they see every day around them. 	Biology The Apprentice Gardener In this unit, our children will build on their Year 1 that plants need water and sunlight; this unit revisits and extends that understanding. They will also grow plants from seeds, learning the sequence of germination to a healthy mature plant. 	Biology How Does Your Garden Grow? During this unit, our children will learn about the absorption and transport of water and nutrients and the role of the leaf in making food for the plant. They will learn about the parts of the flower and the stages of the life cycle of a flowering plant. 	Physics Switched On In this unit, our children will identify electrical appliances, distinguishing between those which are powered by mains and battery. They will explore the production of light, sound and movement by making simple series circuits using single components. 	Physics Feel the Force During this unit, our children will build on their knowledge of how forces; gravity and drag forces; friction, air resistance, water resistance, and up thrust in water; affect movement. They will learn how levers, pulleys and gears allow a small force to have a greater effect. 	Physics Light Up Your World In this unit of work, our children will build on their learning from Year 3 about using light to see; to develop a detailed understanding of mirrors and the reflections that they form, and apply this understanding to make a periscope. 
	Biology Sensing Seasons During this unit, our children will experience 'our changing world', as they observe the effects that changing seasons and weather have on them and on the world around them. They will use their senses as they consider what clothing they should wear in different weather conditions and during different seasons of the year. 	Biology Growing Up In this unit, our children will consider the basic human needs for survival (food, water, and air), the need for warmth and shelter, and additional needs for health and wellbeing. They will also identify the simple differences between living and non-living things and they will be introduced to the human life cycle. 	Physics Can You See Me? In this unit, our children will learn how we see objects, the ways in which specific objects reflect different amounts of light and how these ideas can be applied to ensure we stay safe at night. They will explore what causes a shadow, as well as how the shape and size of a shadow can be affected by its position. 	Biology Human Impact During this unit, our children will learn about the ways that humans change the environment, focusing on how this affects other living things. They will consider how thoughtless behaviour damages local habitats and what happens if food chains are broken by habitat disruption or the removal of a species from an ecosystem. 	Biology Circle of Life In this unit, our children will extend their understanding of what a life cycle is, and learn about the life cycles of mammals, amphibians, insects and birds. They will compare different life cycles, identifying common features and explain key differences. They will learn about incredible journeys that animals undertake to complete their life cycles. 	Biology The Nature Library During this challenging unit, our children will build on their previous knowledge of living things to deepen their understanding of why and how organisms are classified. They will explore the process of classification in relation to the identification of living things. The structure, function and purpose of classification systems will be explored. 
Summer 2						