EYFS - Science through play, observation and discussion

The table below explains which of the seven areas of learning in the EYFS curriculum are most relevant to science. These basically fall into the three main areas:

- Communication and language (asking questions, learning new vocabulary, using talk to discuss, explain and formulate ideas)
- Personal, emotional and social development (healthy eating and healthy living)
- Understanding the world (exploring the natural world using their senses, understanding processes of change e.g., seasons and changes of state, as well as similarities and differences)

Science						
Three and Four-Year-Olds	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"				
	Personal, Social and Emotional Development	Make healthy choices about food, drink, activity and toothbrushing.				
	Understanding the World	Use all their senses in hands-on exploration of natural materials.				
		 Explore collections of materials with similar and/or different properties. 				
		Talk about what they see, using a wide vocabulary.				
		Begin to make sense of their own life-story and family's history.				
		Explore how things work.				
		Plant seeds and care for growing plants.				
		Understand the key features of the life cycle of a plant and an animal.				
		Begin to understand the need to respect and care for the natural environment and all living things.				
		Explore and talk about different forces they can feel.				
		Talk about the differences between materials and changes they notice.				
Reception	Communication and Language	Learn new vocabulary.				
		Ask questions to find out more and to check what has been said to them.				
		Articulate their ideas and thoughts in well-formed sentences.				
		Describe events in some detail.				
		 Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. 				
		Use new vocabulary in different contexts.				

Reception Continued	Personal, Social and Emotional Development		Know and talk about the different factors that support their overall health and wellbeing: regular physical activity healthy eating toothbrushing sensible amounts of 'screen time' having a good sleep routine being a safe pedestrian	
	Understanding the World		 Explore the natural world around them. Describe what they see, hear and feel while they are outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them. 	
ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.	
	Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.	
	Understanding the World	The Natural World	 Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. 	

What does science in EYFS look like at Aldborough?

When starting in reception, children will hopefully have gained the skills listed above at the three to four-year-old level. However, if this is not the case, attempts will be made to fill these gaps and move forward to the reception areas of learning for all.

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them. In addition, listening to a broad selection of stories, nonfiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains.

This is linked with the topic we are looking at to encourage enquiry and exploration through continuous provision. For example, if the topic is 'Marvellous Me' we will look at hygiene/germs etc and our book is Funny Bones. We will have a skeleton in the classroom with x-ray pictures and we will be looking at the human body. We will also have a full science morning on the digestive system – with demonstrations, discussions and linked play.

Broadly our science each year is as follows...

Autumn - we look at hygiene, our bodies and seasonal change

Spring - we look at our local environment, plants and growth and seasonal change

Summer - we look at materials, beaches/environmental issues and seasonal change

The above will cover observations such as

- Observing our local environment, including plants and animals
- Life cycle of a butterfly/frog
- Growing vegetables and/ sunflowers in Class 1 garden
- Observe changes in the environment (seasons)
- Opportunity to discuss how we can care for the natural world around us. Importance of recycling etc
- Forest school sessions to encourage children to foster curiosity and give children freedom to use their senses in the natural world around them and during hands-on experiences