Sandy Lane Primary School Science Curriculum

Mission	**Taking PRIDE in all we do**					
Values	**PRIDE**	Positive	Responsible	Inclusive	Determined	Enquiring
	School Rules	Ready	Respectful	Safe		
Curriculum Intent - To Promote the 5 Values and 3 School Rules						

Science Intent

Our intentions in Science are for children to:

- Have a **positive** approach to learning about scientists and scientific ideas.
- Take **responsibility** for their own learning and challenge themselves to build up a deep level of knowledge, skills and understanding.
- Follow an **inclusive,** small steps approach to help nurture an understanding of the value of scientific skills, as well as learn about a range of diverse scientists including those who have built upon the work of earlier pioneers.
- To be **determined** when learning new scientific concepts and learn from their mistakes and try again.
- Stimulate creativity and inquisitiveness through **enquiry** and exploration of scientific concepts when carrying out investigations.

Science not only provides the foundation for understanding the world around us but the confidence to ask our own questions. At Sandy Lane, Science is a subject that allows children to ask questions, investigate their answers and then explain their findings. This is done by using scientific knowledge, scientific skills and a focus on developing independence in learning. Science is taught in a way that nurtures a lifelong love of learning through purposeful, accurate and imaginative lessons which encourage children to enquire and learn.

At Sandy Lane we believe that through their study of Science, children will be able to research and answer questions in all areas of the curriculum.

Science Implementation

At Sandy Lane, we use White Rose Science which is a “small steps” approach to science teaching. Essential aspects of science are broken down into easily understood chunks. White Rose Science teaches practical approaches to this subject and scientific language, which are learned in a fun and logical way. Through experiment, practice and discussion, children gain core knowledge around:

- Articulating scientific concepts
- Applying scientific vocabulary
- ‘Working scientifically’ skills including systematic and careful observations and following practical scientific methods
- The gathering and interpretation of straightforward scientific evidence
- The use of everyday materials and scientific equipment to solve problems

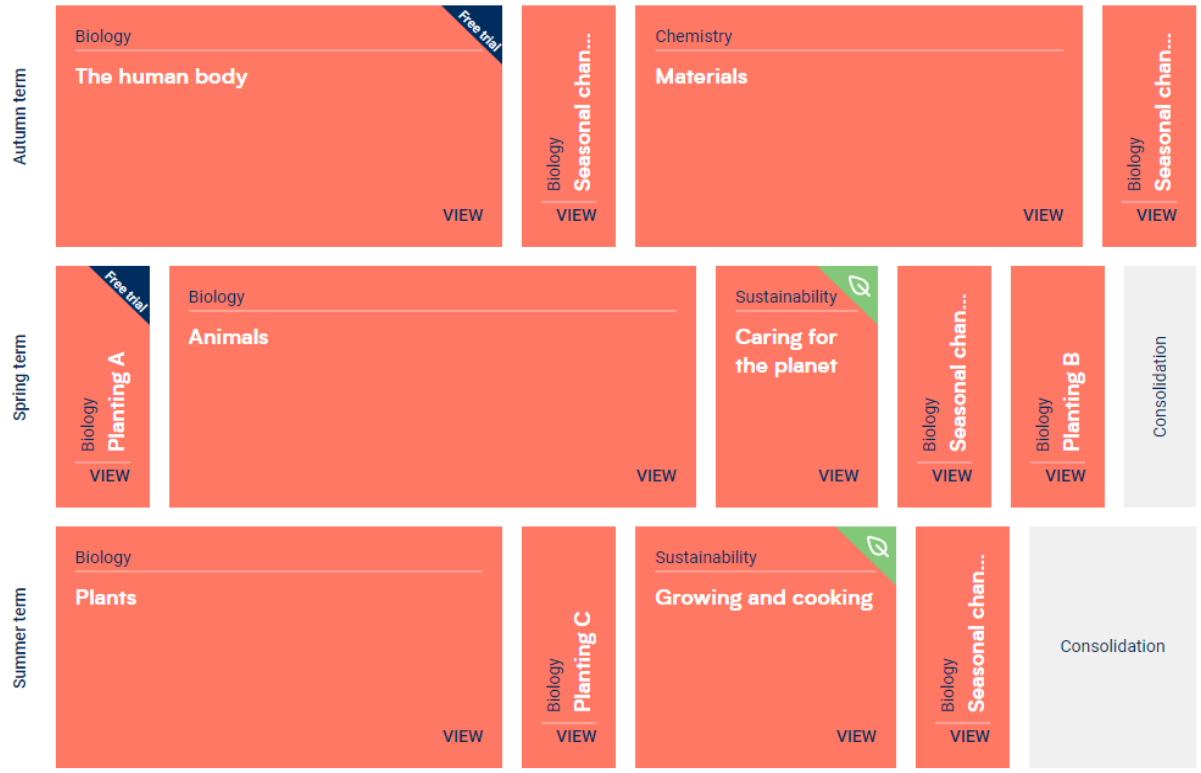
This is a progressive curriculum where children are able to build upon knowledge and skills previously learnt, thereby deepening their understanding as they move through the school. Woven throughout our Science curriculum, the children are taught that sustainability is the key to the future of planet Earth. By learning about harnessing our natural resources and looking after all life that exists, children become empowered and responsible citizens, who strive to look after our world.

In Early Years, Understanding the world involves guiding children to make sense of their physical world and their community. In Nursery this involves talking about different forces they can feel, using their senses in hands-on exploration of natural materials, and talking about the differences between materials. In Reception, children will explore the natural world around them, describe what they see, hear and feel when outside and understand the effect of changing seasons on the natural world around them.

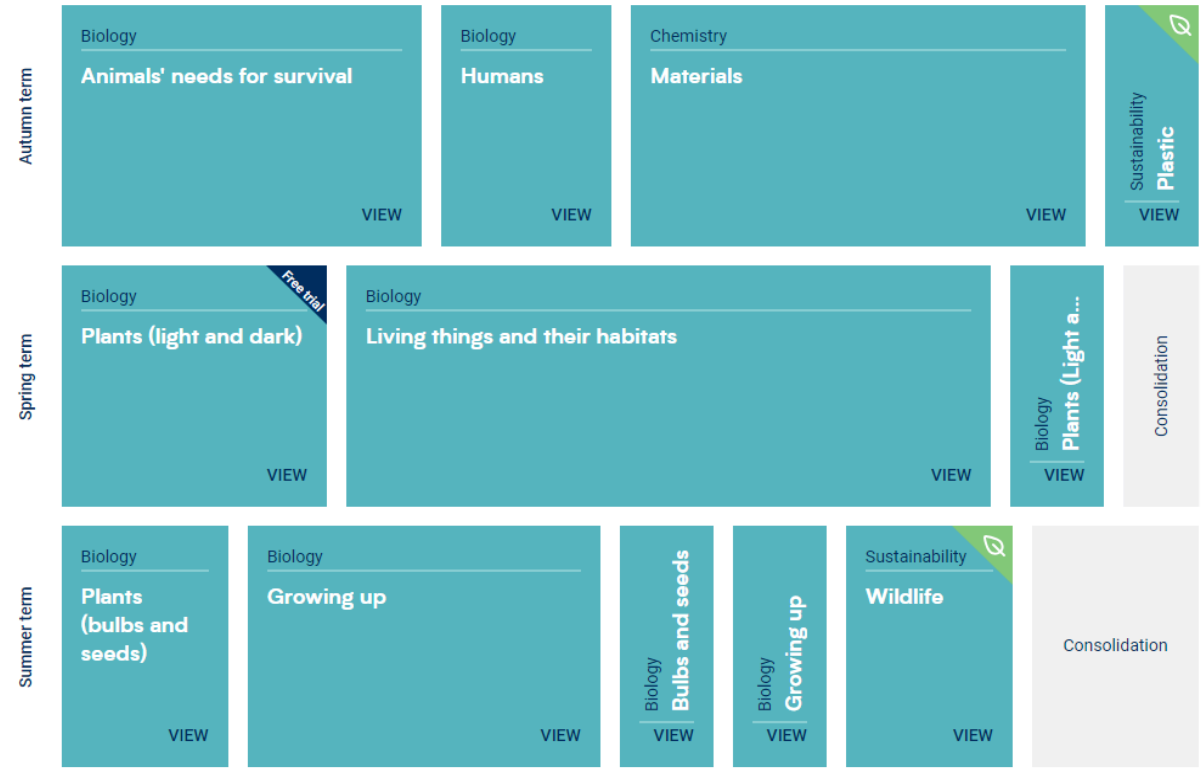
Overview

Reception:

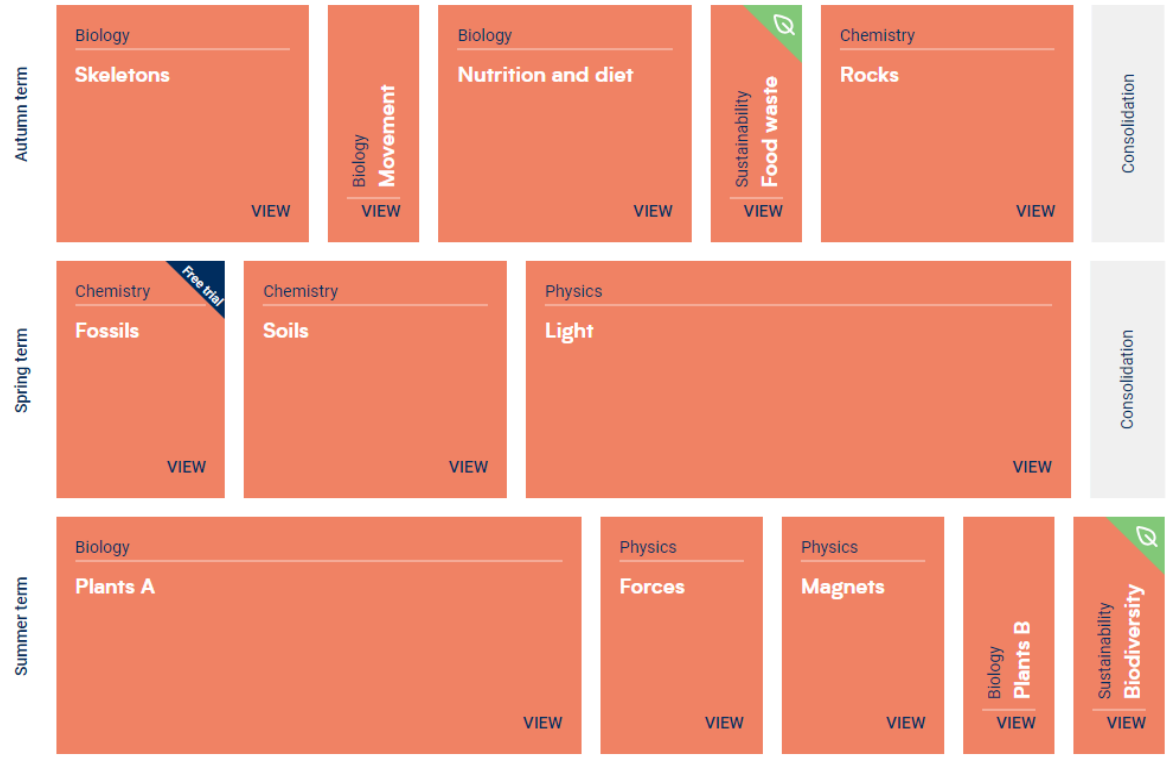
Year 1:


Autumn term
Biology
The human body
Free trial
VIEW
Biology
Seasonal chan...
VIEW
Chemistry
Materials
VIEW
Biology
Seasonal chan...
VIEW
Spring term
Free trial
Biology
Planting A
VIEW
Biology
Animals
VIEW
Sustainability
Caring for the planet
VIEW
Biology
Seasonal chan...
VIEW
Biology
Planting B
VIEW
Consolidation
Summer term
Biology
Plants
VIEW
Biology
Planting C
VIEW
Sustainability
Growing and cooking
VIEW
Biology
Seasonal chan...
VIEW
Consolidation

Year 2:


Autumn term
Biology
Animals' needs for survival
VIEW
Biology
Humans
VIEW
Chemistry
Materials
VIEW
Sustainability
Plastic
VIEW
Spring term
Biology
Plants (light and dark)
Free trial
VIEW
Biology
Living things and their habitats
VIEW
Biology
Plants (Light a...
VIEW
Consolidation
Summer term
Biology
Plants (bulbs and seeds)
VIEW
Biology
Growing up
VIEW
Biology
Bulbs and seeds
VIEW
Biology
Growing up
VIEW
Sustainability
Wildlife
VIEW
Consolidation

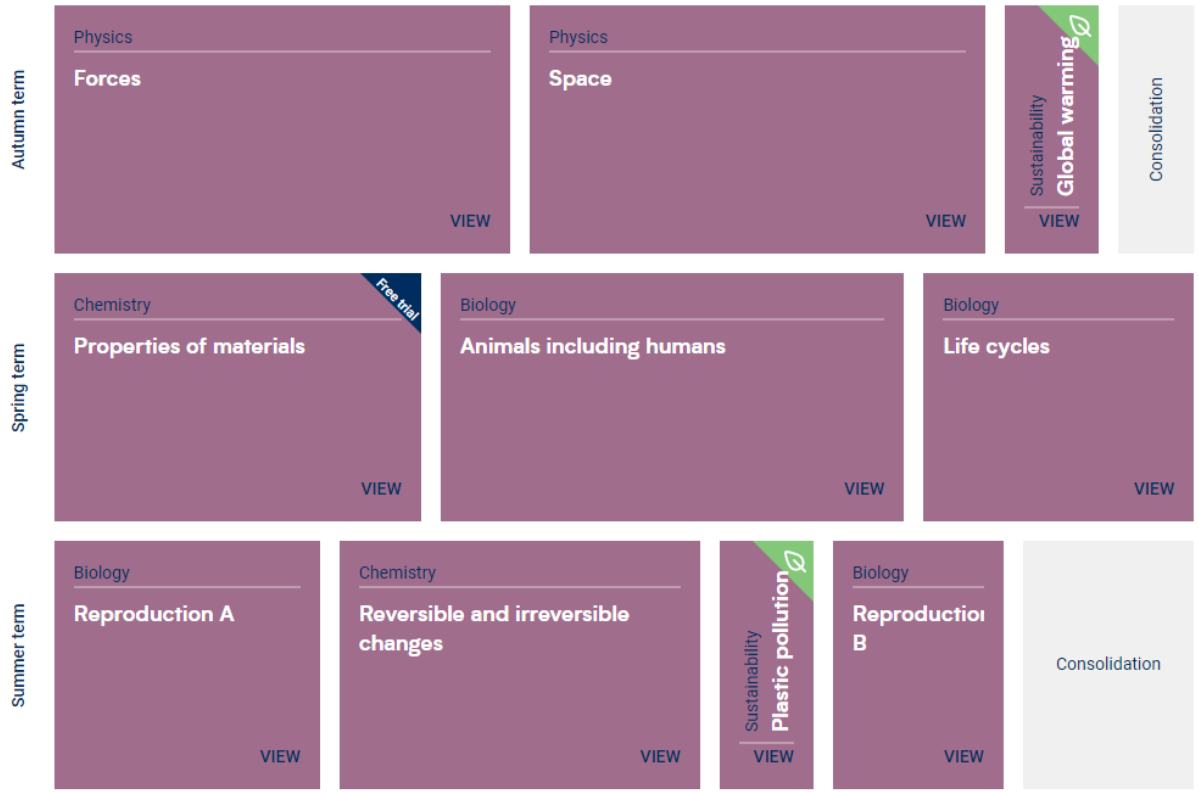
Year 3;


Autumn term
Biology
Skeletons
VIEW
Biology
Movement
VIEW
Biology
Nutrition and diet
VIEW
Sustainability
Food waste
VIEW
Chemistry
Rocks
VIEW
Consolidation
Spring term
Chemistry
Free trial
Fossils
VIEW
Chemistry
Soils
VIEW
Physics
Light
VIEW
Consolidation
Summer term
Biology
Plants A
VIEW
Physics
Forces
VIEW
Physics
Magnets
VIEW
Biology
Plants B
VIEW
Sustainability
Biodiversity
VIEW

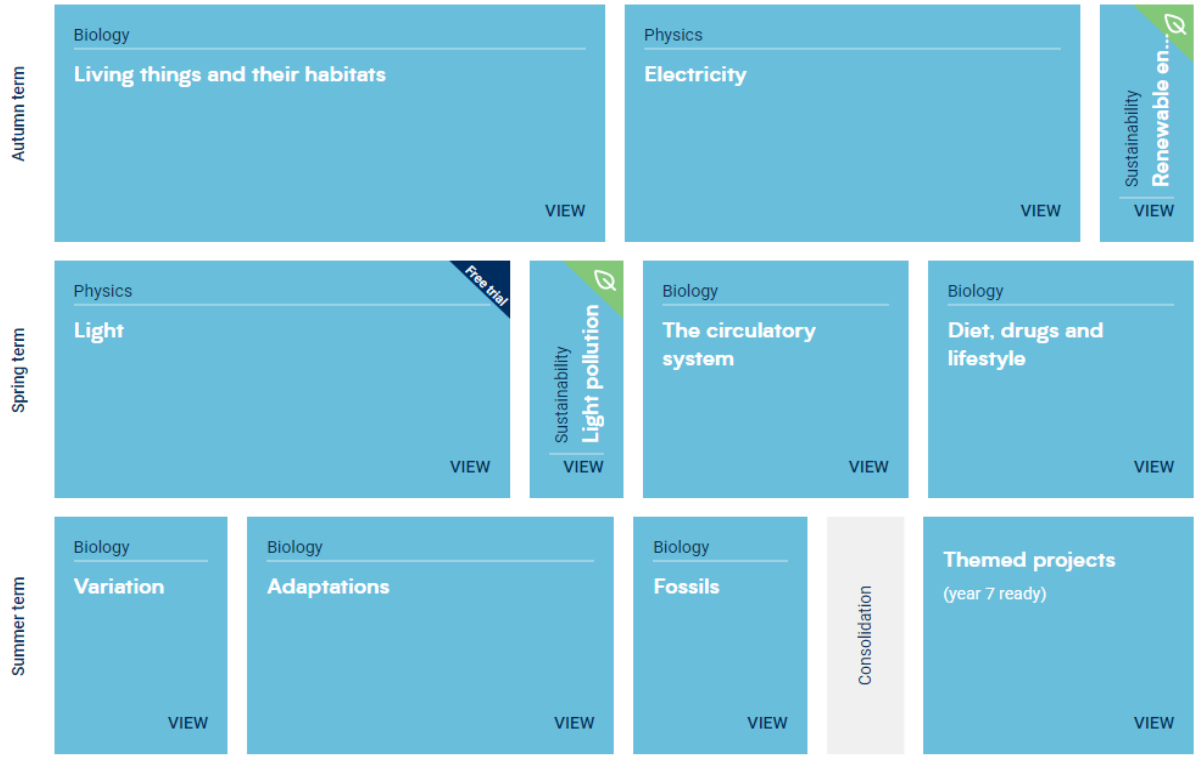
Year 4;


Autumn term
Biology
Group and classify living things
VIEW
Biology
Data collection...
VIEW
Chemistry
States of matter
VIEW
Consolidation
Spring term
Physics
Free trial
Sound
VIEW
Biology
Data collection...
VIEW
Physics
Electricity
VIEW
Sustainability
Energy
VIEW
Consolidation
Summer term
Biology
Data collection C
VIEW
Biology
Habitats
VIEW
Sustainability
Deforestation
VIEW
Biology
The digestive system
VIEW
Biology
Food chains
VIEW

Year 5;


Autumn term
Physics
Forces
VIEW
Physics
Space
VIEW
Sustainability
Global warming
VIEW
Consolidation
Spring term
Chemistry
Free trial
Properties of materials
VIEW
Biology
Animals including humans
VIEW
Biology
Life cycles
VIEW
Summer term
Biology
Reproduction A
VIEW
Chemistry
Reversible and irreversible changes
VIEW
Sustainability
Plastic pollution
VIEW
Biology
Reproductio
B
VIEW
Consolidation

Year 6;


Autumn term
Biology
Living things and their habitats
VIEW
Physics
Electricity
VIEW
Sustainability
Renewable en...
VIEW
Spring term
Physics
Free trial
Light
VIEW
Sustainability
Light pollution
VIEW
Biology
The circulatory system
VIEW
Biology
Diet, drugs and lifestyle
VIEW
Summer term
Biology
Variation
VIEW
Biology
Adaptations
VIEW
Biology
Fossils
VIEW
Consolidation
Themed projects
(year 7 ready)
VIEW