

## Science Curriculum Coverage at Les Landes School



### Early Years Foundation Stage

In Reception class, children will work towards the Early Learning Goal for The Natural World. Children at the expected level of development

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<b>Everyday Materials</b> This unit involves lots of new vocabulary so teaching it at this point in the year complements the children's expanding reading and writing skills. The unit contains lots of scientific enquiry work, building on the skills developed in the autumn term. Enquiries can be tailored to the weather found at this time of year, e.g. investigating the best material for an umbrella.	<b>Animals Including Humans</b> This is a good starting unit for year 1, as children already have scientific experiences (including through EYFS) that feed into the curriculum content in this unit and can be built on (e.g. parts of the human body, animal identification). The unit ties in well with 'All About Me' topics that are often covered in the autumn term.	<b>Seasonal Changes (Autumn and Winter)</b> This unit fits well with the time of year so children can observe the features of both autumn and winter. We have split the Seasonal Changes unit into Autumn and Winter and Spring and Summer. This allows children to observe the seasons at the correct time of year.	<b>Plants</b> This time of year is suited to outdoor learning and growing plants. As noted in the non-statutory guidance of the national curriculum for this unit, children should look at plants throughout the year in their local environment (which is woven into our Seasonal Changes content).	<b>Seasonal Changes (Spring and Summer)</b> This is the correct time of year for observing spring and summer. It offers a good opportunity for retrieval practice, as children also recap their knowledge of autumn and winter. The final lesson in this unit brings all four seasons together.	Scientists and Inventors
	<b>Animals Including Humans</b> This unit could be taught at any time in the year. Early on in the year may be an appropriate time to teach the exercise, balanced diet and hygiene content, as children will be able to follow the advice given throughout the year. This unit can be taught at a time that suits the individual needs of your class and your PSHE curriculum.	<b>Living Things and Their Habitats</b> September and October are ideal times to get outdoors and study habitats in the local area. It is easy to observe plant and animal life (including minibeasts) at this time of year. This unit could also be taught in the summer term.	<b>Biodiversity – Minibeasts</b> This is an ideal time of year for minibeasts. Children can retrieve and build on their knowledge from the Living Things and Their Habitats, Animals Including Humans and Plants topics during this unit and expand their understanding of sustainability themes. Like all PlanIt lessons, this unit has several opportunities to develop working scientifically skills.	<b>Plants</b> Ideally, this unit should be taught after Animals Including Humans, as children will have looked at animal life cycles (a more familiar context) before moving on to plant life cycles here.	<b>Uses of Everyday Materials</b> This unit could be taught at other points in the year but, as much of year 2 requires the outdoor environment, placing the unit here suits the poorer weather conditions generally found in January and February.	
Year 3	<b>Light</b> This time of year allows coverage of the 'dangers of light from the Sun' aim. Conditions at this time of year also enable practical work to investigate shadows outside (in addition to more controlled enquiries in the classroom).	<b>Rocks</b> This unit provides a range of working scientifically opportunities to start progressing these skills at a KS2 level. It is also a good unit to link to Stone Age study in history and provides many opportunities for beginning-of-the-year trips.	<b>Forces and Magnets</b> This is the first time children will have been formally taught about forces and magnets. Placing this unit later in the year allows for more developed reading, writing and working scientifically skills to enable children to access the more difficult substantive content in this unit.	<b>Plants</b> Placing this unit at this point in the year allows access to the outdoor environment in improving weather and at a time that enables observations of plant life cycles and the various parts of the plant.	<b>Animals Including Humans</b> This unit can be taught at any point in the year. The nutrition content is ideal to be taught earlier in the year, as children will be able to follow the advice given throughout the year.	Reduce, Reuse, Recycle Scientists and Inventors
	<b>Animals Including Humans</b> This unit can be taught at any point in the year but the food chain curriculum objective fits in well after children have identified different living things and studied habitats in the Living Things and Their Habitats unit.	<b>Electricity</b> This is the first time children will have formally studied electricity. Placing the unit later in the year allows for more developed reading, writing and working scientifically skills to enable children to access the more difficult substantive content in this unit.	<b>Living Things and Their Habitats</b> This unit can make use of the outdoor environment at a suitable time of year and allows for study of the local environment throughout the rest of the year, as suggested in the non-statutory guidance of the programme of study.	<b>States of Matter</b> It is suggested this unit is taught before Sound so that children have an understanding of particles. The usually wet but warming weather conditions at this time of year can allow for easier observation of evaporation, e.g. puddles or washing drying.	<b>Sound</b> This unit ideally follows the study of particles in States of Matter. As in the Electricity unit, there is a lot of new substantive knowledge in this unit that may be suited to later in the year. This unit can be placed to tie in with your music curriculum.	
Year 5	<b>Forces</b> It is recommended this unit is taught before Earth and Space so that children have an understanding of gravity before that unit is taught.	<b>Properties and Changes of Materials</b> This unit leads on well from year 4 States of Matter. It is a good unit to begin UKS2 with, with plenty of working scientifically skills being developed.	<b>Earth and Space</b> Shorter days at this point in the year allow for observation of the phases of the Moon and discussions about day and night.	<b>Living Things and Their Habitats</b> It may be more appropriate to teach this unit after Animals Including Humans, as children will have an understanding of the human life cycle before going on to study wider mammalian life cycles (and those from other groups) and reproduction in animals and plants.	<b>Animals Including Humans</b> The timing of this unit should be tailored to fit in with the individual class and their needs and your school's PSHE curriculum.	Scientists and Inventors
	<b>Light</b> The positioning of this unit within the year could be flexible; however, controlled light experiments (e.g. using light sources such as torches) may be easier at this point in the year due to darker conditions.	<b>Electricity</b> This unit can be taught at any point in the year but the use of bulbs could be used as an opportunity to retrieve prior knowledge from the Light unit.	<b>Living Things and Their Habitats</b> Children will have a good understanding of the substantive knowledge needed in this unit from their previous learning. This time of year lends itself to any classification work in the local environment.	<b>Evolution and Inheritance</b> It is suggested this unit is taught after the classification content of Living Things and Their Habitats. This is the first time children will have formally studied evolution and inheritance so may be better suited to later in year 6.	<b>Animals Including Humans</b> The content on the impact of diet, exercise, drugs and lifestyle on the way bodies function may be an appropriate message to deliver earlier in the year, as children will be able to follow the advice given throughout the year. This unit can be taught at a time that suits the individual needs of your class and your PSHE curriculum.	