



Grouville School Science Policy 2017

UNRC Article 3: Everyone who works with children should do what is best for each child.

UNRC Article 19: You should not be harmed and should be looked after and kept safe.

UNRC Article 36: You should be protected from doing things that could harm you.



At Grouville School we believe that through high quality teaching and learning of science, children will be taught transferable skills and attitudes that will equip them for their future.

Aims

We aim to provide an education in Science which will:

- stimulate and excite children's interest in science
- provide a variety of scientific experiences which are realistic and relevant to the child's future
- provide opportunities for all children to fulfill their scientific potential
- develop individual scientific skills, concepts and attitudes
- develop each child's understanding of scientific concepts and their ability to apply them in everyday contexts
- facilitate an inquisitive and motivated approach to science through discussion, investigation and active learning
- encourage children to ask and answer scientific questions
- encourage children to plan and carry out scientific investigations choosing the most appropriate equipment for themselves, with consideration for their own safety and others
- promote discussion about the children's work employing suitable scientific vocabulary
- enable children to describe their environment in a scientific way

Principles

We believe science should be taught as:

- it promotes communication in a specific and precise language involving mathematical and logical thinking
- it allows children to develop ways of finding out for themselves and gives them practice in problem solving
- children become more proficient in selecting and using scientific equipment and collating and interpreting results
- it fosters a healthy curiosity in children about our universe and promotes respect for the living and non living
- it allows children to develop original ideas and a questioning attitude
- pupils are encouraged to be open-minded and to try and make sense of what they see and find out
- through teaching and encouraging these skills children will gain a greater understanding about life processes and living things, materials and their properties and physical processes

Well-being and achievement are at the heart of Grouville School so that we can all develop as life-long learners and take responsibility for ourselves and the community.

Learning and Teaching

Foundation Stage

Science in The Foundation Stage is covered in the Understanding of the World section of Development Matters. The children will learn about similarities and differences in relation to places, objects, materials and living things. They will learn to talk about the features of their own immediate environment and how environments might vary from one another. They will make observations of animals and plants and explain why some things occur, and talk about changes.

KS1 and KS2

We are following the 2014 Jersey Curriculum for science which covers a range of Biology, Physics and Chemistry units of work.

It is essential for teachers to find out 'where their children are at' before delivering a new unit. Teachers must allow children to generate their own questions at the beginning of a unit and allow them to show what they already know - this should then inform teachers' medium term planning. Each unit is started with the teacher assessing children's prior knowledge in order to find the right starting point. Teachers are responsible for ensuring that learning intentions are relevant, purposeful and ensure continuity and progression, especially where topics overlap from one year group to another.

Children should have opportunities for individual and collaborative work that involves them doing the finding out - preferably through hands on, investigative work. They should be independent and reflective of their own learning, with the teacher acting as 'coach' and facilitator to guide them in their next steps. Activities should inspire the pupils to experiment and investigate the world around them and to help them raise their own questions such as "Why...?", "How...?" and "What happens if...?"

Teachers must ensure that activities are challenging, motivating and extend pupils' learning. A ceiling will not be placed on the children's learning. Topic cover sheets will ensure a consistent approach to the start of units across the year groups. (see appendix)

Teachers will produce a Medium Term Plan at the beginning of every term which should include: a pre-unit assessment, clear learning questions and activities, planned visits or visitors and investigative as well as topic vocabulary. Medium term planning scrutinies will be carried out half termly and teachers will be given feedback on these. Weekly planning is expected to show a more detailed explanation of the lesson with clear learning questions, learning checklists, differentiation to meet all learning needs as well as any risk assessments. Risk assessments should be made in line with the Policy and Practice Guidelines for Jersey. (see appendix) It is recommended that the minimum time spent on science per week is 1.5 hours in Key Stage 1 and 2 hours in Key Stage 2.

Weekly and medium term planning is stored in the Teachers' Shared Area.

Assessment, Recording and Reporting

- Assessment of science should be ongoing throughout the year in the form of formative assessment, which could include observations, questioning the children and marking their work.

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- Before the beginning of each unit teachers should carry out a pre-unit assessment. This should inform teachers' planning in order to, more accurately, meet the needs of the children.
- For each unit of work teachers will need to assess children on the knowledge gained from the unit as well as their investigative skills. This assessment should be in the form of an activity or investigation whereby the teacher has previously highlighted the skill the children will utilise and the knowledge that they could show. This assessment will help inform the teachers overall judgement.
- Teachers are expected to provide constructive oral and written feedback to their pupils throughout the year.
- Children themselves should be encouraged to be reflective learners - of both their own learning and that of their peers. A range of AFL strategies should be employed and used regularly to encourage the children to be independent learners.
- A teacher assessment for science is entered on SPTO at the end of each term and teachers are expected to update SPTO according to children's achievements.
- Parents are informed of their child's progress twice a year at parent consultation evenings. Science is also reported in a child's Annual Report including information as to whether they are working at, above or below age related national expectations.
- Teacher assessments in Science will be sent to the Education Department at the end of Year 2 and Year 6.

Resources

Science topic and investigation resources are located in classrooms and shared. Please advise the science co-ordinator if additional resources are required or need to be replaced.

Display

All classrooms should display prominently the relevant scientific vocabulary being introduced in current units of work, including the investigative language that will be relevant.

Outdoor Learning

Within our school grounds we have access to the:

- School garden and pond
- Foundation sensory garden
- Forest School (meadow)

Other sites in Jersey

Please consult JLP - The Outdoor Classroom - for an up to date list of locations and contacts that can be used to enrich the teaching of science. As a school we have a close link with Durrell and this is an excellent resource for science. The beach is within walking distance and an excellent resource also. Science provides a 'Natural link' for these visits.

As part of the curriculum at Grouville School children may enjoy outdoor days/stays at Crabbe, St Aubins Fort, The Scouts Centre and PGL France.

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Monitoring and Review

It is the subject co-ordinator's responsibility:

- to support colleagues with the planning and teaching of Science
- to monitor and review the teaching and learning of Science throughout the school by reviewing teachers' planning, carrying out lesson observations and book looks
- to track children's levels and progress made
- to attend courses and share updated curriculum developments with colleagues
- to audit resources

Written by Sharon Kellett, Science Co-ordinator September 2017

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