

Science Plan
St. Joseph's N.S.
Kilcock

Introductory Statement and Rationale

Introduction

This policy is a statement of the aims, objectives, principles, and strategies for implementing the Science programme in St. Joseph's N.S. It was formulated and revised in consultation with the school staff and informed by the Curriculum Statements and Curriculum Guidelines, the children's needs and the staff's expertise and experience.

This policy was devised:

- To provide clear guidelines for teachers
- To ensure consistency throughout the school
- To conform with legislation

Rationale

We recognise Science as an integral element of Social, Environmental and Scientific education. In our school, SESE provides opportunities for the child to explore, investigate and develop an understanding of the natural, human, social and cultural dimensions of local and wider environments, to learn and practise a wide range of skills, and to acquire open, critical and responsible attitudes. SESE enables the child to live as an informed and caring member of local and wider communities.

We recognise the distinct role science has to play in helping children come to terms with the biological and physical world. This plan has been drawn up in response to the 1999 Primary School Curriculum to conform to the principles outlined in this curriculum and to review our practices in light of these principles.

As a whole school plan, it guides and organises the teaching and learning of Science in our school. It will benefit the teachers by informing classroom planning and ultimately benefit our pupils' teaching and learning experiences across the science curriculum.

Vision

Our School Vision

St. Joseph's NS is a Catholic Co-Educational school situated in the town of Kilcock, Co. Kildare. Our vision at St. Joseph's NS is to provide an inclusive and respectful school environment for all. We aim to work co-operatively as a team to create a caring, kind and happy school. At St. Joseph's NS we promote the wellbeing and safety of all those in our school community. We strive to encourage everyone to reach their

potential and to pursue a lifelong love of learning. Integrity and trust are fundamental to our shared vision involving all the partners in the education of our pupils

Vision for Teaching and Learning in Science

Through our school's science programme, we aim to help pupils understand and take an interest in the world and environment around them, both physical and biological. It is our vision that science in our school will be a practical subject as much as possible, with hands-on and inquiry-based learning activities that give an opportunity to develop scientific skills. Environmental activities encouraged in our school will foster a positive attitude and sense of responsibility among our pupils for the natural environment and its relationship with the human environment. Ultimately, we aim to foster in the children a sense of curiosity about the world around them through active and inquiry-based learning.

Aims

We endorse the aims of the Primary School Curriculum for Social, Environmental and Scientific Education:

- To enable the child to acquire knowledge, skills and attitudes to develop an informed and critical understanding of social, environmental and scientific issues
- To reinforce and stimulate curiosity and imagination about local and wider environments
- to enable the child to play a responsible role as an individual, as a family member and as a member of local, regional, national, European and global communities
- To foster an understanding of and concern for the total interdependence of all humans, all living things and the Earth on which they live
- To foster the child's natural curiosity and develop a scientific approach to problem-solving.
- To foster a sense of responsibility for the long-term care of the environment and a commitment to promote the sustainable use of the Earth's resources through personal lifestyle and participation in collective environmental decision-making
- To develop and encourage responsible attitudes and an appreciation of the world.
- To enable the child to communicate ideas and report findings using various media.

Additional Aims

- Participate in the Green Schools Programme to build on the many good practices already in operation to achieve a Green Flag.
- Acquire concept cartoons as a stimulus for inquiry-based learning and as a means of assessment of learning in science.
- We will continue participating in the annual Intel Mini Scientist competition and Science Blast. In the past, we enjoyed great success in this competition at the senior end of the school year, and we hope this will continue

Content of School Plan for Science

This Science plan will be addressed under the following headings.

Curriculum Planning

1. Strands and Strand Units
2. Approaches and Methodologies
3. Assessment and record keeping
4. Children with different needs
5. Equality of participation and access

Organisational Planning

6. Timetable
7. Homework
8. Individual teacher's planning and reporting
9. Staff development
10. Parental involvement
11. Community Links

Ideas and Support Material

12. Success Criteria
13. Implementation
14. Review
15. ICT and Science
16. List of Useful Websites
17. Shared Science Resources
18. Health and Safety

Yearly and Termly Plans for each class level

- Junior and Senior Infants
- First and Second class
- Third and Fourth Class
- Fifth and Sixth Class.

1. The Science Curriculum – Strands and Strand Units

We know the strands, strand units, and content objectives for our class levels and, indeed, for each other's class levels. We feel this is important to ensure a coherent programme throughout the school. As pupils transition from one class level to another, teachers will liaise with one another to ensure continuity and progression.

Teachers will create learning environments where children's ideas can be used where relevant, always ensuring a balance between knowledge, skills and attitudes. Practical work and experiments will be undertaken at all class levels, and the concept of a 'fair test' will be universally applied and taught.

We aim to achieve this using the strands, strand units, concepts and skills outlined below.

The Science Curriculum Will Be Implemented in Two Parts

1. Through the development of Scientific Skills.

The following scientific skills will be developed through active learning and inquiry-based learning approaches in each of the Primary Science Curriculum's strands and strand units.

- | | | |
|----------------|--------------------------------------|--------------------------------|
| 1. Questioning | 3. Predicting | 5. Analysing |
| 2. Observing | 4. Investigating and experimentation | 6. Recording and Communicating |

2. Through Strands and Strand Units.

Living Things

- Myself
- Plants and Animals
- Human Life

Materials

- Properties and characteristics of materials
- Materials and change

Energy and Forces

- Light
- Sound
- Heat
- Magnetism and Electricity
- Forces

Environmental Awareness and Care

- Caring for my locality
- Environmental awareness
- Science and the environment
- Caring for the environment

2. Approaches and Methodology

In the Science curriculum, the strands and strand units are viewed through the lens of the approaches and methodologies:

2.1 General

All children should be provided with the opportunity to access the full range of the Science Curriculum.

In our school, we ensure this happens as follows:

- Pupil participation in hands-on active and inquiry-based learning activities. Textbooks and workbooks may be used to supplement learning.
- There is a hands-on approach to encourage children to understand Science concepts through observation, experimentation and exploration of the local environment.
- All teachers integrate science skills across other areas of the curriculum, for example, through data collection in Maths, etc.
- We ensure that science is a subject that all children can enjoy by actively participating in Science Week activities, quizzes, whole-school science competitions, the Intel Mini Scientist programme, and the ESB Science Blast.

2.2 Linkage and Integration

We encourage the linkage of the strands within science and the integration of science with other subject areas. Pupils' view of the world is holistic; more meaningful learning occurs in an integrated setting. Examples include:

- When feasible, science lessons should be integrated with STEM activities.
- Human Life units on growth and reproduction will integrate with SPHE where possible.
- Where possible, environmental awareness and care are closely integrated with the SPHE and Geography curriculum.
- Design and Make activities will also form part of the Visual Arts content where possible/
- There are many links with the maths curriculum, e.g., graphing the results of investigations, measuring, colour, shape, etc.
- The strand unit on sound is an integral part of the music curriculum, e.g. designing a musical instrument.

2.3 Methodologies

The methodologies we will use include:

- Talk and discussion
- Open questions and problem-solving activities
- Active learning
- Concept maps and brainstorming
- Free exploration with materials
- Use of everyday objects found in the local environment
- Outdoor habitat and fieldwork
- Content spiral from class to class
- Open/closed investigations
- Problem-solving
- Developing skills through content
- Talk and discussion
- Co-operative learning
- Aistear

We will promote the development of good questioning in our classrooms, with pupils and teachers given the opportunity to pose their questions and set up investigations to find answers.

2.4 Practical Investigations

We will include the following investigations:

- Open investigations- pupils will be given or may even suggest an open question for which they will have to design their own investigation and develop their own results.
- Closed activities where the end result is obvious, and there are few variables.
- Fair testing-pupils will be encouraged to develop a sense of what should be kept the same and what should be variable to ensure that an investigation is fair. (see Teacher Guidelines pg 54).

2.5 Talk and Discussion

- We encourage turn-taking, active listening and positive responses to the opinions of others.
- We foster confidence in expressing an opinion and cultivate in the pupils an ability to explain their point of view and how they arrived at the answer to a problem.
- Teachers actively model scientific language used, particularly when discussing the experimentation process.

2.6 Open Questions and Problem-Solving Activities

- Our children learn how to work together as part of a group. They learn how to take turns, listen to others, and appreciate that others' opinions are important.
- This is achieved through small and larger group work, paired work, and whole-class activities.

2.7 Active Learning and Guided Discovery

A hands-on approach is essential for children to understand science concepts. The experience of manipulating and using objects and equipment constructively is essential in developing science concepts and constructive thought throughout the strands of the science programme. This approach is important right through to sixth class and requires access to a considerable amount of equipment. Working with equipment may be done individually, in pairs, or groups, and the storage and use of the equipment may be organised through our central science storage area.

2.8 Free Exploration with Materials

Allowing children to play freely with materials they will later use to solve single or multiple-solution problems is highly productive. Children who have played with materials are more highly motivated and have a much higher success rate later on in practical problem-solving involving these materials.

2.9 Using the Environment

Our school's environmental audit outlines the habitats the children can explore. These habits comprise of the following;

- Grass, Hedgerows, Deciduous trees, Evergreen trees, Compost heap, Outdoor Classroom, Royal Canal walkway and cycle path.

Habitat studies in our school will take into account the following:

- Seasonal study of individual habitats
- Outdoor investigation and exploration
- Sample collection

In our habitat studies, we will explore the following:

- Minibeast studies
- Food chains
- Life cycles
- Adaptations
- Caring for the environment

Other habitats are explored through trips to farms, Donadea Woods, and the zoo. These habitats are explored at different times of the year, allowing pupils to observe and explore concepts such as life cycles, change, and development.

2.10 Skills Through Content

- Pupils will be given the opportunity to engage in Design and Make activities appropriate to their abilities and areas of study.
- The children will be working in a scientific way, questioning, observing, predicting, investigating, analysing and recording and therefore acquiring knowledge.
- They will explore, plan and analyse materials through both design and make and inquiry-based learning activities.
- There will be an emphasis on promoting scientific skills so knowledge will follow.

2.11 Presentation of Work

Various methods of recording pupils' work will include;

- Drawing a picture to show the result
- Using concrete materials to demonstrate how the result was obtained
- SESE copies
- Mini whiteboards
- Individual and projects
- Use of models
- Telling and explaining how the child arrived at a result.
- Chromebooks and iPad presentations

3.0 Assessment and Record Keeping

Assessment in Science concerns the children's mastery of knowledge and understanding of the strands of the science programme and the development of skills and attitudes. Consequently, a broad range of assessment tools and approaches will be implemented.

Information identified through assessment will be communicated to parents at the parent/teacher meetings and in the school report at the end of the year.

3.1 What should be Assessed?

We will assess science:

- Knowledge
- Understanding
- Skills
- Attitudes towards investigation and problem-solving and a sense of responsibility for the environment
- Ability to work collaboratively

3.2 Forms of Assessment

Assessment will be in the form of:

- | | |
|--------------------------|-------------------------------|
| ● Teacher Observation | ● Portfolios of Work |
| ● Teacher Designed Tasks | ● Project Work |
| ● Concept-Mapping | ● Parental and pupil feedback |
| ● Annotated Drawing | ● Written Accounts |
| ● Concept Cartoons | ● Recording of Experiments |

There will be opportunities for the pupils to engage in self-assessment and peer-assessment as they analyse the success of design and make activities and get an opportunity to view their own work.

4.0 Science and Working with Students with Additional Education Needs

In the same way, as we endeavour to meet individual needs in all aspects of the curriculum, we will do our best to make science accessible to as many children as possible as we recognise the potential science has to help children make sense of the physical and biological worlds in which they live.

We are aware of the possibilities for fun and developing a sense of curiosity and wonder that science holds for children.

- Recording will be based on the child's level, e.g., brainstorming and annotating drawings.
- Activities will be differentiated according to ability.
- ICT / digital images will be used to record work
- Hands-on practical work to suit all abilities
- Assistance will be availed of when appropriate

5.0 Equality of Participation and Access

All children will be given equal opportunities across all strands and activities regardless of gender, ethnic background, socio-economic status, ability, and special educational needs.

In keeping with the ethos of our school, every child is afforded the opportunity to develop to his/her potential in every area of learning. The differentiation and implementation of the above principles ensure equal access to an appropriate science education. Equal opportunities are afforded to all pupils to participate in discussions, use manipulatives, presentations, projects, experiments, etc. All children have access to all school services, facilities and amenities, regardless of disadvantage, disability, first language, or membership of any minority group. If necessary, language and instructions will be simplified to accommodate those children whose first language is not English.

6.0 Timetable

With effect from January 2012, as per Department of Education and Skills circular 0056/2011, SESE is allocated the following times:

- Junior and Senior Infants - 2 hours and 25 minutes per week
- 1st Class - 6th Class s: 3 hours per week, one of these three hours devoted to science.

Occasionally, teachers may block periods, for example, during Science Week or in preparation for the ESB Science Blast or Intel minis scientist. At other times, one hour a week from the above allocation will be used for teaching and learning in science.

7.0 Homework

As part of their homework, children may occasionally be asked to complete Science exercises based on work done in the classroom. The teachers may also encourage the children to watch interesting Science programmes (relevant to the Curriculum) on TV or online if the programmes are shown at suitable times and if parents are happy to allow this.

8.0 Teacher's Planning and Reporting

Teachers plan fortnightly regarding the various strands of the Science curriculum for their classes.

- Cúntas Míósúil records actual objectives achieved and strands covered.
- Parent/teacher meetings
- End of year reports

9.0 Staff Development

The sharing of knowledge and skills is encouraged and may occur on school planning days or during class group meetings. Any teachers who have particular expertise/interest in science are invited to guide, support and advise other staff when and where possible. Time may be set aside where possible, and if necessary, to discuss Science at staff meetings for planning and decision-making.

Opportunities/facilities for staff development include;

- Class group meetings
- Access to online websites and resources
- Talks and seminars, e.g. OIDE
- Professional development courses
- Monthly staff meetings.

10 Parental Involvement

- Homework
- Parent/teacher meetings
- Letter/email to parents
- General meetings
- Newsletters
- Website and school Twitter account
- Parents are encouraged to support the school's science programme.
- Involvement in the annual Science Week

11 Community Links

- The 3rd and/or 4th class will participate in the EBS Science Blast Project. This will be decided annually.
- 5th classes participate in the Intel Mini Scientist competition annually
- Local and national agencies may be invited from time to time to work with classes or address pupils.
- Using the local amenities adjacent to the school as a resource for science lessons, e.g. Royal Canal or Donadea Forest.

12. Success Criteria

We will consider this plan a success if the following criteria are reached:

- Evidence of scientific skill and knowledge are developed in pupils throughout their school life.
- Evidence of inquiry-based learning and investigations at all class levels.
- Increased interest in science and the environment throughout the school.

- Evidence of practical activities in the class.
- Resources and equipment are being used appropriately throughout the school.
- Class displays and school presentations
- Evidence of classes engaging in outdoor habitat projects.

13. Implementation

13.1 Roles and Responsibilities


The whole staff is responsible for implementing this science policy and for the proper care and maintenance of resources and equipment. The science postholder is responsible for overall planning and coordination, including monitoring, sourcing, and storing resources and organising our annual Science Week in collaboration with other postholders and all staff.

13.2 Timeframe

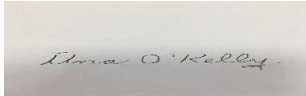
Ongoing implementation and review will be integral to school planning and development.

14. Review

This plan was ratified by BOM on 25th April 2024.

Signed: 

David Powderly
Chairperson BOM

Signed: 

Úna O' Kelly
Principal

This plan will need to be reviewed regularly to ensure the optimum implementation of the Science Curriculum in the school.

Roles and Responsibilities

The plan will be reviewed by the principal and staff led by the Science postholder.

14.1 Timeframe for Next Review

This plan will be reviewed in the 2025/2026 school year.

15. ICT and Science

Each mainstream class teacher has an interactive whiteboard that may be used for teaching Science.

Classes have access to the following digital devices, which may also be used for teaching and learning in science

- Junior Infants - First Class 30 iPads shared
- Second and Third Class 32 Chromebooks shared.
- Fourth Class - Sixth Class 32 Chromebooks at each class level

Teachers will familiarise themselves with all website content prior to children using the sites, and children using the internet are monitored. There is an ICT Acceptable Usage Policy in operation in our school.

16 List of Useful Websites

<http://www.sciencekids.co.nz/experiments.html>
<http://billnye.com/?billnyeresourcetax=home-demos>
<http://www.education.com/science-fair/>
<http://www.sciencekidsathome.com/>
<http://www.bbc.co.uk/bitesize/ks1/science/>
<http://www.bbc.co.uk/bitesize/ks2/science/>
<http://www.bbc.co.uk/bitesize/ks3/science/>
<http://www.bbc.co.uk/education/subjects/zxtncw>
<http://www.primaryscience.ie/index.php> (activities section is great for ideas and experiments)
<http://www.makemegenius.com/> (animated videos)
<http://www.pinterest.com/ravishinglee/what-s-the-matter-solids-liquids-and-gases/>
<http://www.optics4kids.org/home/content/classroom-activities/>
http://www.bbc.co.uk/schools/scienceclips/ages/10_11/science_10_11.shtml
<http://scienceforkids.kidipede.com/>
<http://www.physics4kids.com/index.html>
<http://foodscience.psu.edu/youth/youth>
<http://www.ducksters.com/science/>
<http://www.dpsma.ie>
<http://www.sfi.ie>

17. Science Resources to Support Teaching and Learning

Textbooks may be used as a resource during lessons to support teaching and learning in science.

- Unlocking SESE is a support material for 3rd - 6th class.
- Appendix 1 outlines an inventory of shared resources stored centrally to aid the teaching and learning of Science.

18. Health and Safety

Care and attention will be given to the following:

- Hidden dangers if children move around the classroom.
- Storage facilities.

- Ventilation of the classrooms.
- School Tours/Excursions
- Relevant safety procedures during all tasks

19. Yearly and Termly Planning

Science Topics for Junior Infants and Senior Infants

Strand	Strand Unit	Junior Infants	Senior Infants
Living Things	Myself	Variety and characteristics of humans (All objectives to be covered. Curriculum p.24)	Human life processes (All objectives to be covered- Curriculum p.24)
	Plants and animals	Variety and characteristics of living things. (All objectives to be covered- Curriculum p.24)	Processes of life. (All objectives to be covered- Curriculum P.24)
Energy and Forces	Light	All objectives to be covered- Curriculum p.25	
	Sound	All objectives to be covered- Curriculum p.25	
	Heat		All objectives to be covered- Curriculum p.25
	Magnetism and electricity	<ul style="list-style-type: none"> ● Become aware of the uses of electricity in school and at home ● Identify some household appliances that use electricity ● Become aware of the dangers of electricity 	<ul style="list-style-type: none"> ● Use magnets of different shapes and sizes in purposeful play to explore their effects on different materials ● Investigate the fact that magnets attract certain materials
	Forces		All objectives to be covered- Curriculum p.26
Materials	Properties and characteristics of materials	All objectives to be covered- Curriculum p.27	

	Materials and change		All objectives to be covered - Curriculum p.27
Environmental awareness and care	Caring for my locality	<ul style="list-style-type: none"> ● Observe, discuss and appreciate the attributes of the local environment ● Appreciate that people share the environment with plant and animal life ● Develop a sense of responsibility for taking care of and improving the environment ● Identify, discuss and implement simple strategies for improving and caring for the environment 	<ul style="list-style-type: none"> ● Observe, discuss and appreciate the attributes of the local environment ● Appreciate that people share the environment with plant and animal life ● Develop a sense of responsibility for taking care of and improving the environment ● Identify, discuss and implement simple strategies for improving and caring for the environment

Science Topics for 1st & 2nd Class

Strand	Strand Unit	1 st Class	2 nd Class
Living Things	Myself	Variety and characteristics of living things (All objectives to be covered- Curriculum p.41)	Human life processes (All objectives to be covered - Curriculum p.41)
	Plants and animals	Variety and characteristics of living things (All objectives to be covered - Curriculum p.42)	Processes of life (All objectives to be covered - Curriculum p.43)
Energy and Forces	Light	(All objectives to be covered - Curriculum p.43)	
	Sound	(All objectives to be covered - Curriculum p.43)	
	Heat		(All objectives to be covered - Curriculum p.44)
	Magnetism and electricity	<ul style="list-style-type: none"> ● Explore the effects of static electricity ● Become aware of the uses of electricity in school and at home ● Identify some household appliances that use electricity ● Become aware of the dangers of electricity 	<ul style="list-style-type: none"> ● Use magnets of different shapes and sizes in purposeful play to explore their effects on different materials ● Investigate that magnets attract magnetic materials, such as iron and steel ● Investigate that magnets attract certain materials through other materials
	Forces		(All objectives to be covered- Curriculum p.45)
Materials	Properties and characteristics of materials	All objectives to be covered- Curriculum p.46	

	Materials and change		All objectives to be covered- Curriculum p.46
Environmental awareness and care	Caring for my locality	All objectives to be covered- Curriculum p.48	All objectives to be covered- Curriculum p.48

Science Topics for 3rd & 4th Class

Strand	Strand Unit	3 rd Class	4 th Class
Living Things	Human Life	Human life processes: <ul style="list-style-type: none"> ● Develop an awareness of the importance of food for energy and growth ● Explore and investigate how people move 	Variety and characteristics of humans: <ul style="list-style-type: none"> ● Become aware of the names and structure of some of the body's major external and internal organs Human life processes: <ul style="list-style-type: none"> ● Understand the physical changes taking place in both male and female during growth to adulthood ● Become aware of and investigate breathing
	Plant and animal life	Variety and characteristics of living things: <ul style="list-style-type: none"> ● Observe, identify and investigate the animals and plants that live in local environments ● Sort and group living things into sets according to observable features ● Use simple keys to identify common species of plants and animals ● Understand that plants use light energy from the sun ● Discuss simple food chains Processes of life: <ul style="list-style-type: none"> ● Investigate the factors that affect plant growth 	Variety and characteristics of living things: <ul style="list-style-type: none"> ● Develop an increasing awareness of plants and animals from wider environments ● Observe and explore some ways in which plant and animal behaviour is influenced by, or adapted to, environmental conditions ● Use simple keys to identify common species of plants and animals ● Come to appreciate that animals depend on plants and indirectly on the sun for food Processes of life:

			<ul style="list-style-type: none"> • Become aware of some of the basic life processes in animals
Energy and Forces	Light	All objectives to be covered- Curriculum p.63	
	Sound	All objectives to be covered- Curriculum p.63	
	Heat		All objectives to be covered- Curriculum p.64
	Magnetism and electricity	<ul style="list-style-type: none"> • Explore the effects of static electricity • Observe the effects of static electricity on everyday things in the environment • Learn about electrical energy • Investigate current electricity by constructing simple circuits • Examine and group materials as conductors and insulators • Become aware of the dangers of electricity 	<ul style="list-style-type: none"> • Learn that magnets can push or pull magnetic materials • Explore how magnets have poles and investigate how these poles attract and repel each other • Explore the relationship between magnets and compasses • Examine and classify objects and materials as magnetic and non-magnetic • Investigate that magnets attract certain materials through other materials
	Forces		All objectives to be covered- Curriculum p.65
Materials	Properties and characteristics of materials	All objectives to be covered- Curriculum p.66	
	Materials and change		All objectives to be covered- Curriculum p.67
Environmental awareness and care	Environmental awareness	All objectives to be covered- Curriculum p.68	
	Science and the environment		All objectives to be covered- Curriculum p.69
	Caring for the environment	All objectives to be covered- Curriculum p.70	All objectives to be covered- Curriculum p.70

Science Topics for 5th & 6th Class

Strand	Strand Unit	5 th Class	6 th Class
Living Things	Human Life	All objectives to be covered- Curriculum p.83	
	Plant and animal life		All objectives to be covered- Curriculum p.84
Energy and Forces	Light	All objectives to be covered- Curriculum p.85	
	Sound	All objectives to be covered- Curriculum p.85	
	Magnetism and Electricity	<ul style="list-style-type: none"> ● Learn about electrical energy ● Investigate current electricity by constructing simple circuits ● Become aware of how some common electrical appliances work ● Become aware of and understand the dangers of electricity 	<ul style="list-style-type: none"> ● Learn that magnets can push or pull magnetic materials ● Investigate how magnets may be made ● Explore the use of magnets to lift and hold objects
	Heat		All objectives to be covered- Curriculum p.86
	Forces		
Materials	Properties and characteristics of materials	All objectives to be covered- Curriculum p.88	
	Materials and change		All objectives to be covered- Curriculum p.89

Environmental awareness and care	Environmental awareness	All objectives to be covered- Curriculum p.90	
	Science and the environment		(All objectives to be covered- Curriculum p.91
	Caring for the environment	All objectives to be covered- Curriculum p.92	All objectives to be covered- Curriculum p.92

Appendix 1 - Shared Resources for Teaching and Learning in Science

Living Things	Energy and Forces	Materials	Environmental Awareness and Care
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<p>Human Life</p> <ul style="list-style-type: none"> ○ Mirrors-plastic ○ Metre sticks ○ Thermometer ○ Stethoscope <p>Animals and Plants</p> <ul style="list-style-type: none"> ○ Flowerpot ○ Pooters ○ Small trowels ○ Plastic Tubing ○ Magnifying Glass ○ Nature viewers ○ Microscope 	<p>Forces</p> <ul style="list-style-type: none"> ○ Wheeled toys ○ Oil, grease, polish, wax ○ Sandpaper ○ Springs ○ Marbles/Balls ○ Construction sets such as Mecca no, wheels, pulley, axle rod, gears, timers ○ Stop clock and watches ○ Balloons ○ Plastic syringes ○ Pulleys <p>Magnetism and Electricity</p> <ul style="list-style-type: none"> ○ Magnets – including bar, button, horseshoe ○ Screw in light bulb holders ○ Bulbs and batteries ○ Iron filings ○ Crocodile clips ○ Needles ○ Wires ○ Compasses ○ A range of magnetic materials ○ A selection of metal ○ Steel wool <p>Light</p> <ul style="list-style-type: none"> ○ Torches ○ Curved mirrors and Plane mirrors ○ Glass blocks and triangular prism ○ Shiny objects that will act as mirrors; spoons ○ Transparent, translucent and opaque materials ○ Colour filters ○ Candles ○ Old spectacle lenses <p>Heat</p> <ul style="list-style-type: none"> ○ Thermometers ○ Candles <p>Sound</p> <ul style="list-style-type: none"> ○ Tuning forks ○ Rubber bands 	<ul style="list-style-type: none"> ○ Funnels and measuring beakers ○ Polystyrene sheets ○ Sieves, plastic, various meshes ○ Sample of different fabrics and fibres ○ Food colourings ○ Samples of soap and detergents ○ Materials from the kitchen or bathroom (sugar, salt, soda, chalk, oil, soda water, lime water, tea, coffee, bath salts, flour) ○ Samples of different metals ○ Pebbles, stones, bricks and rocks ○ Samples of different woods and wood products ○ Samples of different types of paper (blotting paper, tissue paper, paper towels, waxed paper, greaseproof paper, newsprint) ○ Corks 	<ul style="list-style-type: none"> ○ Picker Pals Initiative ○ Litter Pickers
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