

# The Red Door School



## Science School Plan

**Developed:** 2020-2021

**Next Review date:** 2021-2022



School Plan: Science

Month	Theme	Year 1	Year 2
S E P T E M B E R	Myself	<b>Strand: Materials and Change</b> <b>Strand units: Heating and Cooling</b> <b>Exploring the effects of water on a variety of materials (Water Play using different types of paper)</b>  <u><b>General:</b></u> As well as discussing what papers can be used, discuss and record predictions as to what might happen to the different types of paper. Mix papers (tissue, paper, card, cardboard) with water to observe and experience the way materials change when wet. Discuss predictions and how they were similar/different from observations during the experiment.  <u><b>Mild:</b></u> Before the experiment, discuss and record ideas on what different papers can be used and what materials are needed. Mix papers (tissue, paper, card, cardboard) with water to observe and experience the way materials change when wet.  <u><b>Moderate:</b></u> Mix papers (tissue, paper, card, cardboard) with water to observe and experience the way materials change when wet.	<b>Strand units: Heating and Cooling</b> <b>Identify some materials that are waterproof (My rainy day clothes)</b>  <u><b>General:</b></u> Discuss and compare suitable and unsuitable clothing for rainy weather. Predict what happens to different clothing under such conditions. Experience group outside in the rain, while recording the differences in suitability for difference clothing and how it reacts in the rain.  <u><b>Mild:</b></u> Compare what clothes are suitable and which are <u>not</u> suitable for rainy weather, identifying which clothes are worn on rainy, sunny and cold days, and how they differ. Experience group outside in the rain, while wearing the discussed materials and clothing needed.  <u><b>Moderate:</b></u> Weather group to discuss and suggest materials or clothes suitable for rainy days, and identify the clothes he/she wears on a rainy day. Experience group outside in the rain, while wearing the discussed materials and clothing needed.
		<b>Linkage/Integration:</b>	<b>Linkage/Integration:</b>
		<b>My Family</b>	<b>Strand: Materials and Change</b> <b>Strand units: Heating and Cooling</b> <b>Observe and describe materials when they are wet and when they are dry (Paper Mâché Mud pies – messy art based activity)</b>  <u><b>General:</b></u> Discuss materials needed to make different objects (sand for sandcastles/soil for mud pies/paper, glue and water for paper mache)



		<p>Experiment, measure and record exact amounts of each material required for each object. Observing the effect of pouring of milk and mixing water with soil or sand to make mud pies or sandcastles. Make observations during the lesson.</p> <p><b>Mild:</b> Structured experimentation using paper, soil/sand, water, milk and glue to recreate paper mâché and mud pies/sandcastles from examples given. Observing the effect of pouring of milk and mixing water with soil or sand to make mud pies or sandcastles. Make observations during the lesson.</p> <p><b>Moderate:</b> Free play experimentation using paper, soil/sand, water, milk and glue. Observing the effect of pouring of milk and mixing water with soil or sand to make mud pies or sandcastles. Make observations during the lesson.</p>	<p>Observe and anticipate the way food changes when cooked or baked. Record the different states of the food during its transitions. Exploring ways in which liquids and solids may be kept hot or cold and respond with interest to the ways in which ice-cream, butter, chocolate, water, popcorn, toffee, syrup change when heated/cooled</p> <p><b>Mild:</b> Prepare the materials needed for experimenting with food. Actively and safely assist in the cooking and baking food process, while exploring ways in which liquids and solids may be kept hot or cold and respond with interest to the ways in which ice-cream, butter, chocolate, water, popcorn, toffee, syrup change when heated/cooled. Take ice-cubes from the freezer to cool drinks</p> <p><b>Moderate:</b> Observing that an ice-cream will melt if left near heat or in the sun, that chocolate can be melted in the microwave. Starburst can be melted in microwave to make slime. Exploring ways in which liquids and solids may be kept hot or cold and respond with interest to the ways in which ice-cream, butter, chocolate, water, popcorn, toffee, syrup change when heated/cooled</p>
		<p><b>Linkage/Integration: History/Literacy – Stories</b></p>	
<p style="writing-mode: vertical-rl; text-orientation: mixed;">O C T O B E R</p>	<p>Autumn</p>	<p><b>Strand: Materials and Change</b></p>	
		<p><b>Strand units: Mixing and Other Changes</b></p>	
		<p><b>Begin to investigate how materials may be changed by mixing (Liquids that will not mix and those that can't be separated – colour potions – autumn colours)</b></p> <p><b>General:</b> Comparing difference between irreversible changes - mixing paint and water potions – which mixes faster, textures and brightness of colours. Baking cakes. Measuring exact ingredients. Predictions for outcome. Noting whether cake can be changed back to original ingredients.</p> <p><b>Mild:</b></p>	<p><b>Strand units: Mixing and Other Changes</b></p> <p><b>Explore some simple ways in which materials may be separated (Simple to complex reversible mixing)</b></p> <p><b>General:</b> Group discussion for predictions in separating soil and water mixture. Mixing soil and water to produce dirty water. Using coffee filters to filter the dirty water, removing the soil from the water. Repeat until all the soil is removed from the water.</p> <p><b>Mild:</b></p>



		<p>Investigating and explores changes that cannot be reversed. Mixing ingredients to bake cakes. Bake cake. Note how ingredients cannot be separated again.</p> <p><b>Moderate:</b> Exploring and investigating irreversible changes. Mixing paints to create new colours. Mixing water and food dye, then mixing together to create potions. Explore liquids that will not mix (oil and water)</p>	<p>Mixing sand and water. Using sieves of varying meshes during sand and water play to separate the materials.</p> <p><b>Moderate:</b> Mixing metal counters/paper with other materials. Using magnets or ruler charged with static electricity to separate materials Mixing stones and water. Using pincer grip to remove stones from water during water play to separate the materials.</p>
		<b>Linkage/Integration:</b>	<b>Linkage/Integration:</b>
Halloween (History)	<b>Strand: <a href="#">Materials and Change</a></b>		
	<b>Strand units: <a href="#">Mixing and Other Changes</a></b>		<b>Strand units: <a href="#">Mixing and Other Changes</a></b>
	<p><b>Examine the changes that take place in materials when physical forces are applied (Mixing with force - eggs, cream, sweets, water, washing up liquid, playdough)</b></p> <p><b>General:</b> Predicting what might happen when materials are changed by what we do to them. Baking Halloween fairy cakes. Beating/Whisking eggs and ingredients. Mixing water and icing sugar to make icing for the cakes. Adding food dye to colour the muffins and the icing.</p> <p><b>Mild:</b> Investigate</p> <p><b>Moderate:</b> Observing the changes when materials are beaten, whisked, mixed, squashed, pulled, or bent and the effect of whisking water and washing-up liquid Using manipulative skills to mould materials Explore how some materials can be squashed, bent, squeezed, hammered, twisted, stretched</p>		<p><b>Explore some simple ways in which materials may be separated (Gross Halloween mixtures)</b></p> <p><b>General:</b> Mixing salt, sand and water. Discuss and question how the three materials might be separated once mixed. Mixing all three. Using coffee filter/sieve, the sand is removed. Discuss how water and salt can be separated. Take a small amount of the salty water and boil under the water evaporates and only the salt remains.</p> <p><b>Mild:</b> Oil and water. Will it mix? Investigating whether the two materials mix or not. How to separate the two if the do/don't.</p> <p><b>Moderate:</b> Mixing sand and water. Using sieves of varying meshes during sand and water play to separate the materials.</p>
	<b>Linkage/Integration:</b>		<b>Linkage/Integration:</b>
N	Planet Earth In Space	<b>Strand: <a href="#">Living Things</a></b>	



O V E M B E R		<p><b>Strand units: <u>Myself</u></b></p> <p><b>Attend to the varying physical characteristics of self, adults and other students/ identify parts of the body (Me and everyone around me)</b></p> <p><b>General:</b> Taking photos of various people in school and making simple to complex jigsaws from the pictures of people cut up. Cutting and labelling the body parts of each person and then putting the jigsaw back together.</p> <p><b>Mild:</b> Participating in games such as “Simon says”, “Hokey Pokey” and carry out actions on verbal request Recognising and initiating actions involving main parts of the body.</p> <p><b>Moderate:</b> Pointing out family members, friends, class members in group photos. Showing by expression, gesture or vocalisation that changes in appearance of each person are noticed. Identifying, by touch or other means, some of the main parts of the body and what these parts do. Mirror play - looking in the mirror and imitate adult actions involving main parts of the body.</p>	<p><b>Strand units: <u>Myself</u></b></p> <p><b>Recognise and measure physical differences between people, while naming and identifying external parts of the male and female body (What makes us all different)</b></p> <p><b>General:</b> Shadow portraits. Sitting in front of the light from the projector and tracing an outline of their portrait. Portrait is cut out and the various facial parts are named and labelled. My body. What are the different names for the parts of the body and are they different to others? (Comparing and recording differences hair/eye colour, height, age, gender)</p> <p><b>Mild:</b> Identifying (by naming, signing or pointing) parts of the body, using appropriate anatomical terms, where possible. Identify differences in age and height)</p> <p><b>Moderate:</b> Identify differences in hair colour, eye colour, skin colour Point to/sign parts of the body Measuring height, using measuring chart Identify (by naming, signing or pointing to) parts of the body, using appropriate anatomical terms. where possible Point to/sign parts of the body</p>
		<b>Linkage/Integration:</b>	<b>Linkage/Integration: Science - Materials</b>
D E C E M B E R	Christmas (History)	<p><b>Strand: <u>Energy and Forces</u></b></p> <p><b>Strand units: <u>Magnetism and electricity</u></b></p> <p><b>Use magnets of different shapes and sizes in purposeful play, to explore their effects on different materials and investigate the fact that magnets attract certain materials (Magnet Play)</b></p> <p><b>General:</b> Learn that magnets can push or pull magnetic materials (10 Frame Magnetic wand and counters). Exploring how magnets have poles and investigate how these poles attract and repel each other. Investigate how magnets may be made.</p>	<p><b>Strand units: <u>Magnetism and electricity</u></b></p> <p><b>Respond to sensory experiences provided by a variety of electrical appliances and equipment and explore the effects of static electricity (Electric Sensory Group)</b></p> <p><b>General:</b> Predicting and experimenting with static electricity. What will it do and how can we do it? Attracting pieces of tissue paper by rubbing a balloon on his/her head. Take it a step further with static worms. Designing and</p>



		<p>Using these ideas to make a fishing game using magnets (One on a piece of string and cutting out fish and placing small magnets on them) Experimenting further to see if these magnets work through cardboard, water, plastic, paper, wood</p> <p><b>Mild:</b> Exploring how magnets have poles, and investigate how these poles attract (pull) and repel (push) each other Investigating that magnets attract certain materials through other materials Investigating if the force of the magnet can be blocked by putting something in its way, or by wrapping something around the magnet Making a Christmas fridge magnet.</p> <p><b>Moderate:</b> Show surprise or interest when objects are attracted using magnets. Learning that magnets can push or pull objects on which they act. Playing with magnetic letters and numerals. Using magnets to sort materials in a junk box into those that are magnetic and those that are not</p>	<p>cutting some worm shapes out of tissue paper. Use the charged balloon to make the worms dance.</p> <p><b>Mild:</b> Demonstrating static electricity by experiencing a tingling sensation when cleaning television computer screen. What else can static electricity do? Using a balloon rubbed off their jumper/hair. Using the balloon to raise their hair. Experiencing crackling noise when taking off a jumper</p> <p><b>Moderate:</b> Showing an interest in a variety of electrical equipment aimed at sensory exploration. Initiating operation of equipment in order to gain sensory feedback and join in to control events Using a pincer grip to control a switch to give sensory feedback and anticipate results. Attending to experiences of the senses of in a focussed way. Reacting to sensory experiences.</p>
<p>J A N U A R Y</p>	<p>Winter- hot and cold</p>	<p><b>Strand: Energy and Forces</b></p> <p><b>Strand units: Heat</b></p> <p><b>Recognise the difference between hot and cold identify ways of keeping objects and substances warm and cold (Heat and our clothes)</b></p> <p><b>General:</b> Discuss and compare suitable and unsuitable clothing for cold weather. Predict and identify how we feel in cold conditions wearing both suitable and unsuitable clothing. Experience group outside in the cold, while recording the differences in suitability for difference clothing and how we are feeling.</p> <p><b>Mild:</b></p>	<p><b>Strand units: Heat</b></p> <p><b>Become aware of different sources of heat, compare temperatures in different places in the classroom, school and environment (What Heats Us?)</b></p> <p><b>General:</b> Nature walk – designing and creating a checklist of what materials and clothing are needed when going on a walk in winter in order to keep warm. Checklist is to be used before leaving for the walk. A thermometer is to be brought on walk and used to measure the temperature in different areas (field, shade, classroom, etc.) These are to be recorded and the differences to be observed and discussed.</p> <p><b>Mild:</b></p>



		<p>Indicate understanding of importance of keeping objects and substances hot and cold. Identify the differences in weather and what makes a day warm and cold.</p> <p>How do we keep warm? Discussing what clothes help heat us up when we're cold. Compare what clothes are suitable and which are <u>not</u> suitable for cold weather, identifying which clothes are worn on sunny and cold days, and how they differ.</p> <p>Experience group outside in the cold, while wearing the discussed materials and clothing needed.</p> <p><b>Moderate:</b> Have attention drawn to changes in weather temperature and recognise that clothes keep us warm and cosy. Experience the cooling effects of a fan, heating effect of hairdryer. How is this related to the weather? Recognise that it is warm when the sun shines and cold when there is wind and snow.</p>	<p><b>Moderate:</b> Identifying further sources of heat and identifying ways in which homes and buildings are heated. Identifying sources of heat when asked and experiencing heat coming from a classroom heater, cooker, hairdryer (note safety aspects). Nature walk - Dressing up warmly to go on a nature trail in the winter.</p>
		<p><b>Linkage/Integration:</b></p>	<p><b>Linkage/Integration: Science – Living Things</b></p>
Weather		<p><b>Strand: Energy and Forces</b></p> <p><b>Strand units: Light</b></p> <p><b>Explore simple properties of light and observe colours in the environment (Light and dark – inside and out (the sun))</b></p> <p><b>General:</b> Recording the various types of light observed indoors and outdoors. Design a chart to demonstrate the different light sources found. Animal shadows game - Making animal shapes using hands and shadows from the light. Are the shapes clearer indoors or outdoors? Why?</p> <p><b>Mild:</b> Exploring a range of types of light, both indoors and outdoors. Playing with the light and demonstrating an understanding of simple properties of light.</p>	<p><b>Strand units: Light</b></p> <p><b>Sort objects into sets according to colour and discuss differences between day and night, light and shade (Daytime and Night-time)</b></p> <p><b>General:</b> Experimenting in a dark room (sensory room) and describing what we can/can't see. Realising that we cannot see in the dark but that some animals can, for example a cat, an owl. Constructing a chart to illustrate the different activities we do during daytime and night-time. Listen to stories or rhymes about light and dark and night and day</p> <p><b>Mild:</b> Distinguishing between colours and matching them (different shades) Listen to stories or rhymes about light and dark and night and day.</p>



		<p>Exploring different light sources and light-changing materials that create different effects (reflective, fluorescent, translucent paper or materials) Exploring dark and bright colours and become aware of different shades of colour.</p> <p><b>Moderate:</b> Looking for different sources of light in the classroom/school and outside. Where is the Sun? Covering and uncovering his/her eyes, try on sunglasses and noting the difference. Showing interest in the colour of plants, animals or materials Experience darkness in a darkened or multi-sensory room, searching for people and objects in the dark, and observe as the light is gradually increased.</p>	<p>Daytime and night-time activities - Showing understanding that we sleep during the night when it is dark and go to school during the day when it is bright. What other things do we do during this time?</p> <p><b>Moderate:</b> Matching colours in the environment and find objects to place on, for example, "Our yellow table". Sorting objects by colour into sets of two. Experience a range of visual contrasts: brightness and darkness (Day and night). Listen to stories or rhymes about light and dark and night and day.</p>
		<p><b>Linkage/Integration: Numeracy/Science – taking and recording data</b></p>	<p><b>Linkage/Integration:</b></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">F E B R U A R Y</p>	<p>Love</p>	<p><b>Strand: Energy and Forces</b></p> <p><b>Strand units: Sound</b></p> <p><b>Explore simple properties of sound and recognise and identify a variety of sounds in the environment</b> <b>(We Love Sound group – find the sound game, instruments and guess the person from the voice recording)</b></p> <p><b>General:</b> Listening to a variety of sound sources, describing the sounds and classifying them into sound families. Have opportunity to participate in activities that encourage sound discrimination and identification of the sound source. Keep very quiet and identify in his/her immediate environment a variety of sound sources. Listen to a tape of familiar voices, distinguishing who the voice belongs to.</p> <p><b>Mild:</b> Using a wide range of familiar and unfamiliar musical instruments to explore simple properties of sound. Keep very quiet and identify in his/her immediate environment a variety of sound sources.</p>	<p><b>Strand units: Sound</b></p> <p><b>Identify and differentiate between high and low sounds, loud and soft sounds. Explore ways of making different sounds, using a variety of materials.</b> <b>(Let's make sounds – Making instruments, exploring high/low/loud soft, making story sound effects and making a string phone)</b></p> <p><b>General:</b> Making a simple telephone using tins and string/wire, experimenting to find the best way to operate the phone to get the clearest sound possible.</p> <p><b>Mild:</b> Begin to control the sounds he/she makes, making high and low sounds using own body and investigate how changes in materials, volume and beaters affect the sound produced. Make sound effects to accompany a poem, story or song by controlling the sounds themselves.</p>





	<p>Listen to a tape of familiar voices.</p> <p><b>Moderate:</b> Respond to a range of sounds, locating the source of the sound and experiencing contrasts of silence and sound. Feel vibrations when instruments are played and use instruments to explore simple properties of sound. Explore different sound-making sources. Have opportunities to explore a wide range of familiar and unfamiliar musical instruments. Keep very quiet and identify in his/her immediate environment a variety of sound sources. Listen to a tape of familiar voices.</p>	<p><b>Moderate:</b> Make loud and soft sounds using objects - Play tambourine, drum, shaker and hammer pegs, bang bricks on table. Begin to control the sounds he/she makes by copying modelled sounds and experience a range of auditory contrasts.</p>
	<p><b>Linkage/Integration: Music</b></p>	<p><b>Linkage/Integration: Music</b></p>
<p>Animals</p>	<p><b>Strand: Living Things</b></p> <p><b>Strand units: Plants and Animals</b></p> <p><b>Observe and explore a wide range of living things (Minibeast hunt)</b></p> <p><b>General:</b> Design and make a checklist of common minibeasts, small animals and plants that can be found within the school environment (garden and yard). Become aware of common plants and animals in the environment by looking, touching, smelling, and tasting (where appropriate). Observe footprints or droppings left by a variety of animals; take note of insects that are attracted to a particular plant; identify the birds that visit the bird-table. Observe a wider variety of animals, wherever possible in their natural habitat.</p> <p><b>Mild:</b> Using the checklist to independently find as many of the minibeasts, animals and plants as possible. Become aware of common plants and animals in the environment by looking, touching, smelling, and tasting (where appropriate).</p>	<p><b>Strand units: Plant and Animals</b></p> <p><b>Observe and explore a wide range of living things and handle living things appropriately with guidance (Nature walk and garden centre)</b></p> <p><b>General:</b> Research what is needed to grow a simple herb garden. Design and make a shopping checklist list of items needed for this. Research an appropriate route to the garden centre (one in Monkstown) that passes areas with trees (for nature walk). Observe common insects and mini-beasts of habitats such as ponds, trees, hedges, grass, rocks, soil. Complete the shopping list and purchase the required materials to construct a herb garden.</p> <p><b>Mild:</b> Follow map to the garden centre, observing and recording plants and animals encountered along the way. Complete the shopping list and purchase the required materials to construct a herb garden.</p>



		<p>Observe footprints or droppings left by a variety of animals; take note of insects that are attracted to a particular plant; identify the birds that visit the bird-table.</p> <p>Observe a wider variety of animals, wherever possible in their natural habitat.</p> <p><b>Moderate:</b> Become aware of common plants and animals in the environment by looking, touching, smelling, and tasting (where appropriate). Observe footprints or droppings left by a variety of animals; take note of insects that are attracted to a particular plant; identify the birds that visit the bird-table. Observe a wider variety of animals, wherever possible in their natural habitat.</p>	<p>Observe common insects and mini-beasts of habitats such as ponds, trees, hedges, grass, rocks, soil.</p> <p><b>Moderate:</b> Have opportunities to go on field trips to local garden centres, forests (Monkstown Garden centre) Observe common insects and mini-beasts of habitats such as ponds, trees, hedges, grass, rocks, soil. Show response of pleasure, interest or anxiety in the presence of animals. In the garden centre, identify, by touch or other means, some parts of plants.</p>
M A R C H	Spring	<p><b>Linkage/Integration:</b></p>	<p><b>Linkage/Integration: Buying items for next activity – Grow a garden</b></p>
		<p><b>Strand: Living Things</b></p> <p><b>Strand units: Plants and Animals</b></p> <p><b>Recognise and identify external parts of plants and animals and observe growth and change in some living things, appreciating that living things have essential needs for growth (Planting Plants – Growing our own flowers)</b></p> <p><b>General:</b> Research how to care for a plant. Recognise that plants need water to grow. Explore conditions for growth of bulbs and seeds. Design a “My Plant Needs....” Visual and a checklist of what is required to plant seeds/plants. Fill half of plant pot with soil. Sprinkle seeds into soil. Put plant into soil. Put more soil over seeds/in with the plant. Use a watering can dampen the soil. Compare the pots with seeds vs those with plants, labelling the changes and parts of the plant. Read through the “My Plant Needs...” visual and place plant pots by the window. Fill in sheet with missing labels for plant parts.</p>	<p><b>Strand units: Plants and Animals</b></p> <p><b>Handle living things appropriately with guidance and recognise and identify external parts of plants and animals, appreciating that living things have essential needs for growth (Growing a herb garden)</b></p> <p><b>General:</b> Participate in a project to grow a herb garden. Research and design a simple step by step task analysis on constructing a basic herb garden. Design a herb garden set of rules and responsibilities – i.e. watering, etc. Measure soil to be placed in pots. Plant the seeds/plants in the soil and then measure water to water them.</p> <p><b>Mild:</b> Participate in a project to grow a herb garden Gather materials required for planting – spade, trowel, soil, gloves, watering can, seeds, plants, pots, etc. Organise the materials and give to each child/adult. Plant the seeds/plants in the soil and then water.</p>



		<p><b>Mild:</b> Using the checklist, gather materials for planting flowers and seeds (pots, soil, gloves, water, etc.) Fill half of plant pot with soil. Sprinkle seeds into soil. Put plant into soil. Put more soil over seeds/in with the plant. Use a watering can dampen the soil. Compare the pots with seeds vs those with plants, labelling the changes and parts of the plant. Read through the “My Plant Needs...” visual and place plant pots by the window.</p> <p><b>Moderate:</b> Fill half of plant pot with soil. Sprinkle seeds into soil. Put plant into soil. Put more soil over seeds/in with the plant. Use a watering can dampen the soil. Compare the pots with seeds vs those with plants, labelling the changes and parts of the plant (Recognise that seeds grow into flowering plants). Read through the “My Plant Needs...” visual and place plant pots by the window. (Become aware that plants need water and animals need food and water and recognise that plants also need light). Observe life cycle of plants and recognise whether they are living or dead. Recognise that plants need water to grow. Explore conditions for growth of bulbs and seeds.</p>	<p><b>Moderate:</b> Participate in a project to grow a herb garden. Help with plant care, such as watering. Identify, by touch or other means, some parts of plants. Be aware of the smell, texture and appearance of herbs and other plants.</p>
		<p><b>Linkage/Integration:</b></p>	<p><b>Linkage/Integration:</b> Science – previous lesson on garden centre visit. SPHE/Geography – Environmental Awareness &amp; Care</p>
<p>Mothers Day</p>		<p><b>Strand:</b> <b>Environmental Awareness and Care</b></p>	
		<p><b>Strand units:</b> <b>Environmental Awareness and Care</b></p>	<p><b>Strand units:</b> <b>Environmental Awareness and Care</b></p>
	<p>St Patrick’s Day</p>	<p><b>Differentiated activities:</b> <b>Keep Our Class Space Nice (observe, identify and appreciate the natural and human features of the local environment)</b> <b>General:</b> Identify positive aspects of natural and built environments through observation, discussion and recording: colours, textures and shapes in materials/buildings/walls, expressing views on features he/she finds</p>	<p><b>Differentiated activities:</b> <b>Our Rubbish (become aware of ways in which the environment can be polluted or harmed)</b> <b>General:</b> What’s Rubbish? – Food Preparation. During baking or other food prep activity, recognising that there are waste products as a result; put egg shells/vegetable peelings into a special bin for the compost heap.</p>



		<p>attractive or unattractive. What can we do to make the environment even nicer?          Assist in keeping my space clean and tidy: contributing to and experiencing an attractive, welcoming, colourful, clean classroom. He/she will help clean up after groups and snack-times, attend to new artwork on walls, care for new flowers indoors or outdoors.</p> <p><b>Mild:</b>          Observe, identify and discuss attractive elements of physical, natural and human features: colours and features of the playground, colours of flowers and trees in the school grounds/park during the different seasons, water features in the local environment.</p> <p>Assist in keeping my space clean and tidy: contributing to and experiencing an attractive, welcoming, colourful, clean classroom. He/she will help clean up after groups and snack-times, attend to new artwork on walls, care for new flowers indoors or outdoors.</p> <p><b>Moderate:</b>          Keeping my space clean and tidy: contributing to and experiencing an attractive, welcoming, colourful, clean classroom. He/she will help clean up after groups and snack-times, attend to new artwork on walls, care for new flowers indoors or outdoors.</p>	<p>During transitions around the school environment, become aware of litter, pollution and vandalism; identify the types of litter around the school and the activities that created them.</p> <p><b>Mild:</b>          What's Rubbish? - Look for evidence of harm caused to the school environment: litter in yard, broken furniture, etc. Recognising that broken things that cannot be fixed become waste materials: throw broken plates and cups in the bin, become aware that small rubbish bins are emptied into larger containers stored in the school grounds.</p> <p><b>Moderate:</b>          What's Rubbish? – Matching activity, placing rubbish in the bin and organising items for keeping. Identifying common waste products: know that sweet/crisp wrappers and empty juice cartons are rubbish. Know that rubbish has to be disposed of in an appropriate way: put used tissues into a bin in the classroom.</p>
A P R I L	Easter	<p><b>Linkage/Integration: Geography</b></p>	<p><b>Linkage/Integration: Geography</b></p>
		<p><b>Strand: Environmental Awareness and Care</b></p>	<p><b>Strand units: Environmental Awareness and Care</b></p>
		<p><b>Strand units: Environmental Awareness and Care</b></p> <p><b>Differentiated activities: Caring for the School (identify, discuss and implement simple strategies for improving and enhancing the school environment)</b></p> <p><b>General:</b>          Through group activity, develop a sense of responsibility for taking care of and enhancing the school environment: hanging works of art on the class walls, keeping our corridors clean, ensuring the toilets are flushed and no water on floor, participating in the planting of trees and flowers in the school grounds, setting stones in the garden to create habitats (building and maintain a bug hotel).</p> <p><b>Mild:</b>          Through group activity, begin to develop a sense of responsibility for taking care of and enhancing the school environment: hanging works of art on the class walls, keeping our corridors clean, ensuring the toilets</p>	<p><b>Strand units: Environmental Awareness and Care</b></p> <p><b>Differentiated activities How To Care For the Environment (identify and help to implement simple strategies for protecting, conserving and caring for the Environment)</b></p> <p><b>General:</b>          Participate in activities that contribute to and protect the environment:          - collecting rainwater for watering the school garden          - collecting of papers, aluminium cans or other materials for recycling from each classroom          - identifying simple things we can do for the environment at school and at home: turning water off when brushing teeth, turning lights off when leaving the classroom, etc          'Things <b>WE</b> can do together'</p> <p><b>Mild:</b></p>



		<p>are flushed and no water on floor, participating in the planting of trees and flowers in the school grounds, setting stones in the garden to create habitats (building and maintain a bug hotel).</p> <p><b>Moderate:</b> Begin to develop an awareness of the importance of taking care of and enhancing the school environment: watering plants, changing water in vases of flowers, wiping down tables, sweeping the floor, picking up litter.</p>	<p>'Things <b><u>WE</u></b> can do together'</p> <ul style="list-style-type: none"> <li>- caring for one's own property and that of others</li> <li>- keeping classroom, school and play spaces clean and tidy, participating in a rota for tidying the area outside his/her classroom</li> <li>- turning off the tap to save water</li> <li>- collecting paper or cans for recycling</li> <li>- participating in a project to enhance the school environment: planting bulbs, sunflowers, trees etc.</li> <li>- caring for a living thing in the classroom – a plant, caterpillars</li> </ul> <p><b>Moderate:</b> 'Things that <b><u>I</u></b> can do'</p> <ul style="list-style-type: none"> <li>- caring for clothes, toys and other possessions</li> <li>- tidying the classroom by putting objects in appropriate storage boxes</li> <li>- disposing of litter appropriately: throwing empty wrappers and tissues away.</li> </ul>
		<p><b>Linkage/Integration: SPHE/Geography – Environmental Awareness &amp; Care</b></p>	<p><b>Linkage/Integration: SPHE/Geography – Environmental Awareness &amp; Care</b></p>
<p>Air and Water</p>		<p><b>Strand: Living Things</b></p> <p><b>Strand units: Plants and Animals</b></p> <p><b>Observe and explore a wide range of living things and become aware of animals and plants of other environments (Beach Trip)</b></p> <p><b>General:</b> Experience and anticipate trips into the wider environment: beach. Observe common insects and mini-beasts of habitats such as seashore and a wider variety of animals, wherever possible in their natural habitat Show response of pleasure, interest or anxiety in the presence of animals. Keep a written/pictorial record of the various animals and plants encountered in the different environments – school and beach.</p> <p><b>Mild:</b> Experience and anticipate trips into the wider environment: beach. Observe common insects and mini-beasts of habitats such as seashore and a wider variety of animals, wherever possible in their natural habitat</p>	<p><b>Strand units: Plants and Animals</b></p> <p><b>Observe and explore a wide range of living things and become aware of animals and plants of other environments, sorting and grouping living things into sets (Zoo trip)</b></p> <p><b>General:</b> Experience and anticipate trips into the wider environment: the zoo. Research the animals in Dublin zoo, noting how they are sorted and grouped by area. What other ways might the animals be grouped and sorted? Keep a written/pictorial record of the various animals and plants encountered in the different environments. Compare the animals/plants found at the beach last year to those that are found in the zoo. Are there any animals found in both environments?</p>



		<p>Show response of pleasure, interest or anxiety in the presence of animals. Using a camera or iPad, document the trip and the beach environment.</p> <p><b>Moderate:</b> Experience and anticipate trips into the wider environment: beach. Observe common insects and mini-beasts of habitats such as seashore and a wider variety of animals, wherever possible in their natural habitat Show response of pleasure, interest or anxiety in the presence of animals. Develop an awareness by listening to stories of plants and animals from other environments (by the seaside). Recognise that some animals and plants can be found in places beyond their immediate environment.</p>	<p><b>Mild:</b> Experience and anticipate trips into the wider environment: the zoo. Document the various animals by taking pictures. Sort these animals according to certain characteristics – size, species, colour, etc.</p> <p><b>Moderate:</b> Experience and anticipate trips into the wider environment: zoo. Observe a wider variety of animals, wherever possible. Show response of pleasure, interest or anxiety in the presence of animals Develop an awareness by listening to stories, watching nature programmes of plants and animals from other environments (the zoo). Recognise that some animals and plants can be found in places beyond their immediate environment.</p>
M A Y	Outdoors	<p><b>Linkage/Integration: Geography (beach trip)</b></p>	<p><b>Linkage/Integration:</b></p>
		<p><b>Strand: Materials</b></p> <p><b>Strand units: Materials</b></p> <p><b>Observe and investigate a range of familiar materials in the immediate environment. Describe and compare materials, noting the difference in colour, shape and texture. Know about some everyday uses of common materials.</b> <b>(Material Exploration)</b></p> <p><b>General:</b> Describe familiar and unfamiliar objects according to simple properties: size, shape, texture. Engage in sorting and matching activities: make a set of soft/bendy/hard objects, participate in a feely-bag game or a ‘feely walk’. Begin to distinguish between natural and manufactured materials: examine fabrics in clothes shops: cotton, plastic, leather jackets.</p> <p><b>Mild:</b> Explore the properties of a range of natural materials (sand, water, leaves, bark, shells, stones, feathers): be aware of the different colours, textures, shapes and smells, and indicate preferred materials.</p>	<p><b>Strand units: Materials</b></p> <p><b>Group materials according to certain criteria. Investigate materials for different properties. Recognise that the shape of some materials can be changed</b></p> <p><b>General:</b> Investigate materials to discover their properties: roughness, ability to float, shape, perishable/frozen. Describe the simple properties of familiar materials: compare objects as being rough or smooth, hot or cold, discriminate between food and non-edible substances. Identify, by verbal or non-verbal means, a wide variety of foods. Distinguish between raw and cooked food: know some foods are usually cooked before being eaten, give examples of foods that are prepared by baking/cooking. Participate in a class project on collage, exploring different themes: early work will concentrate on colour/texture, later work might include a ‘metallic’ collage.</p> <p><b>Mild:</b></p>



		<p>Explore objects and materials provided, in an appropriate way, with direction: mix materials, such as sand and water, water and flour, jelly and water.</p> <p><b>Moderate:</b> Using all of the senses to explore and investigate a wide variety of objects and materials (and their properties) during free play: roll and stretch dough, splash and pour water, tear and scrunch paper. Handle and use basic tools and equipment during the exploration of materials: use paint brushes and paint, use a plastic hammer to strike pegs on a pegboard. Explore a variety of natural and manufactured materials in context: use touch and smell to explore water, wood, textiles, paper, food, plastic, metal, rock. Identify some common materials by naming or pointing to them: paper, stone, sand, wood.</p>	<p>Compare simple differences between materials: compare two objects for one difference, such as colour, size, texture, and smell. Participate in a class project on collage, exploring different themes: early work will concentrate on colour/texture, later work might include a 'metallic' collage.</p> <p><b>Moderate:</b> Communicate about an object according to one of its properties: given a choice indicate a soft/small/red object. Participate in a class project on collage, exploring different themes: early work will concentrate on colour/texture, later work might include a 'metallic' collage.</p>
J U N E	Holidays and Summer	<p><b>Linkage/Integration: Art – using different materials to create</b></p>	<p><b>Linkage/Integration: SPHE – Food Safety</b></p>
		<p><b>Strand: Materials and Change</b></p> <p><b>Strand units: Heating and Cooling</b></p> <p><b>Explore the effects of water on a variety of materials, and observe/describe materials when they are wet and when they are dry, identifying some materials that are waterproof</b></p> <p><b>General:</b> Have experience of the planning process in testing the strength of paper when soaked in water: collect different types of paper, watch closely when paper soaks up water, predict which paper will be strongest, which will tear or disintegrate. Experiment with papier mâché. Suggest materials or clothes suitable for rainy days. Make a class collection of paper and plastic carrier bags: discuss which of the bags would be best for carrying wet swimming gear.</p> <p><b>Mild:</b> Mix materials with water: salt, coffee, powder paint, sand, marbles, observe what happens. Choose to wear a waterproof jacket on a rainy day.</p>	<p><b>Strand units: Heating and Cooling</b></p> <p><b>Explore the effects of heating and cooling on everyday objects and materials while beginning to investigate how materials may be changed by mixing. Examine the changes that take place in materials when physical forces are applied.</b></p> <p><b>General:</b> Use a hairdryer to dry hair. Take ice-cubes from the freezer to cool drinks. Actively and safely assist in cooking and baking food. Observe and anticipate the way food changes when it is cooked or baked: the effect of heat on dough, cakes or buns rising, permanent changes (baking bread in an oven). Make and flavour ice-cream in a cookery class.</p> <p><b>Mild:</b> Explore ways in which liquids and solids may be kept hot or cold: the effect of wrapping or covering, using different materials, such as paper, fabrics, foil, using flasks and coolers.</p>



	<p>Experiment with papier mâché.</p> <p><b><u>Moderate:</u></b> Observe and experience the way materials change when wet: respond with interest when materials are seen to change, drop objects in water to see if they float or sink, feel the difference between wet and dry materials. Observe the effect of pouring milk: on corn flakes, Rice Krispies and other cereals. Mix water with soil or sand to make mud pies or sandcastles. Identify the clothes he/she wears on a rainy day: raincoat, umbrella, boots, hat.</p> <p><b><u>Linkage/Integration:</u></b></p>	<p>Know that an ice-cream will melt if left near heat, that chocolate can be melted in the microwave. Test, under supervision, the effects of heating and cooling on water.</p> <p><b><u>Moderate:</u></b> Watch the effect of the sun's heat on his/her ice-pop. Respond with interest to the ways in which ice-cream, butter, chocolate, water, pop-corn, toffee, syrup change when heated/cooled. Mix paints to make new colours, mix water and sugar/water and salt, mix the ingredients for a cake. Explore how some materials can be squashed, bent, squeezed, hammered, twisted, stretched: Play-doh, Plasticine.</p> <p><b><u>Linkage/Integration:</u></b></p>
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