

**Primary Science – Guidelines for Primary Teachers
(Scholastic Year 2021-2022)
Year 3 Learning Outcomes**

**Learning Outcome 1
*What do Scientists do?***

Learning Outcome 1 *What do Scientists do?* will be integrated throughout the framework for Level 5 (Year 3 and Year 4).

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| 3.1.1 | I can ask questions about the world around me. |
| 3.1.2 | I can find out about a simple scientific idea. |
| 3.1.3 | I can make a prediction about a situation from a limited number of options. |
| 3.1.4 | I can carry out a simple practical investigation with the teacher’s support. |
| 3.1.5 | I can record observations in a simple format. |
| 3.1.6 | I can make simple conclusions from my direct observations. |
| 3.1.7 | I can apply knowledge to practical situations. |
| 3.1.8 | I can describe what I did and what happened by talking about it or by drawing a diagram. |
| 3.1.9 | I can identify some science occupations. |
| 3.1.10 | I can name and use some items of basic scientific equipment. |
| 3.1.11 | I can use simple measuring devices. |
| 3.1.12 | I can follow written or verbal instructions related to keeping safe. |
| 3.1.13 | I can work on an experiment in a group under adult supervision. |

**Learning Outcome 2
*How do we stay alive?***

LEARNING OUTCOMES
Children will be able to:

KEY VOCABULARY

LEARNING OPPORTUNITIES
Children should be encouraged to:

3.2.1	<u>ANIMALS</u> I can identify some characteristics of a living thing.	movement, respiration, sensitivity, growth, reproduction, excretion, nutrition.	<ul style="list-style-type: none"> Observe by means of multimedia or live animals, characteristics of living things.
3.2.2	I can group animals in different ways according to their characteristics (e.g. farm/wild, with wings/no wings, two legs/four legs/no legs, fur/feathers etc.)	farm, wild, wings, legs, fur, feathers, scales, tail, fins.	<ul style="list-style-type: none"> Sort pictures, multimedia or plastic animals. Visit local animal sanctuaries or a local farm. Match and sort animals to the place where they live (land, water or air) using pictures or interactive activities.
3.2.3	I can identify common animals that live on land, in water or can fly.		
3.2.4	<u>PLANT LIFE</u> I can name and describe the purpose of the basic parts of a plant.	roots, stem, trunk, branches, leaves, flower, seeds, roots, absorb water, support plant, sun gives energy, insect, pollen, growth.	<ul style="list-style-type: none"> Plant seeds in class and observe growth. Record plant growth. Observe different kinds of plant/trees/flowers in a nearby garden. Carry out simple experiments e.g. soaking a flower stem in coloured water.
3.2.5	I can put the different stages in the life of a flowering plant in order.		
Learning Outcome 3 <i>How do we keep fit and healthy?</i>			
	LEARNING OUTCOMES <i>Children will be able to:</i>	KEY VOCABULARY	LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i>
3.3.1	<u>KEEPING HEALTHY</u> I can identify healthy and unhealthy food.		<ul style="list-style-type: none"> Use a journal to follow their eating habits.
3.3.2	I can demonstrate some things I should do to keep my body fit and healthy.		

		<p>healthy, unhealthy, sugar, fat, energy, physical exercise, personal hygiene, follow a healthy diet.</p>	<ul style="list-style-type: none"> • Build up class chart showing good eating habits. • Use a journal and follow their daily practices regarding these three activities: exercise, personal hygiene and diet. • Give practical examples of things they should do to keep their body fit and healthy.
<p>Learning Outcome 4 <i>How do our senses help us gather information?</i></p>			
	<p>LEARNING OUTCOMES <i>Children will be able to:</i></p>	<p>KEY VOCABULARY</p>	<p>LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i></p>
3.4.1	<p><u>SENSES</u> I can name the five senses and can match each sense to its sense organ</p>	<p>sight, hearing, taste, smell, touch eyes, ears, tongue, nose, skin, taste buds, sweet, sour, salty, bitter.</p> <p>skin, cold, heat, pain.</p>	<ul style="list-style-type: none"> • Relate to how our senses help us in our everyday life. • Sort food items according their taste. • Sort items according to their scent. • Understand the importance of smell for our safety in everyday life. • Use hands to sort cold & hot items from an opaque bag.
3.4.2	<p>I can identify parts of the body that are directly and indirectly involved in tasting.</p>		
3.4.3	<p>I can identify familiar substances by way of smell.</p>		
3.4.4	<p>I can use my sense of touch to determine how hot or cold something is.</p>		

3.4.5	<u>SOUND</u> I can identify different sound in my everyday life (including soft/loud sounds).	soft, quiet, loud, noise.	<ul style="list-style-type: none"> Use of multimedia activities to hear, identify and sort different common types of sound.
3.4.6	<u>LIGHT</u> I can classify light sources as natural or artificial.	source of light, natural, artificial, man-made.	<ul style="list-style-type: none"> Identify different sources of light using realia or multimedia resources.
3.4.7	I can explore and create optical illusions.	camouflage, optical illusion, animated.	<ul style="list-style-type: none"> Explore and create optical illusions.

Learning Outcome 5
What is energy?

	LEARNING OUTCOMES <i>Children will be able to:</i>	KEY VOCABULARY	LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i>
3.5.1	<u>ENERGY AROUND US</u> I can describe how our bodies produce heat (eg. shivering, hairs on our bodies standing on end) and how we keep warm (by eating, wearing the right clothing) or cool (by sweating).	sweat, panting, shivering, body hairs, fur, fat (blubber), goose bumps, hibernate, evaporation, insulate, protect, clothing, heating, cooling.	<ul style="list-style-type: none"> Observe animals (including humans) through realia or multimedia resources and identify ways in which they keep their bodies warm or cool. Conduct simple experiments to understand how animals control their body temperature.
3.5.2	<u>ELECTRICAL ENERGY</u> I can describe the role of electricity in everyday life.	energy sources, wind turbines/farms, solar panels, hydroelectric dams.	<ul style="list-style-type: none"> Discuss the importance of electricity in our everyday lives.
3.5.3	I can describe what life was like before electricity.		<ul style="list-style-type: none"> Understand how life was like before electricity by means of multimedia resources.

<p>3.5.4</p> <p>3.5.5</p>	<p>I can identify ways of limiting energy use at home and at school.</p> <p>I can build a simple electric circuit and show that all parts need to be connected.</p>	<p>energy saving, energy efficient, energy consumption.</p> <p>complete / incomplete circuit, wire, bulb, battery, component.</p>	<ul style="list-style-type: none"> • Walk around the school/home and identify ways of consuming less energy e.g. classrooms / corridors light switched on unnecessarily; A/C switched on while door is left open; boiling water in a pan with no lid on; leaving the TV on unnecessarily; leaving the water running while brushing teeth etc.) • Create posters or slogans and identify ways of saving energy. • Learn how to construct a basic circuit using a battery, wires and a bulb. • Learn that all parts need to be connected for the circuit to function properly.
<p>Learning Outcome 6 <i>What are things made of?</i></p>			
	<p>LEARNING OUTCOMES <i>Children will be able to:</i></p>	<p>KEY VOCABULARY</p>	<p>LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i></p>
<p>3.6.1</p>	<p><u>MATERIALS</u> I can describe common properties of common materials.</p>	<p>transparent, opaque, flexible (bendy), stretchy, rigid, hard, soft, absorbent, waterproof,</p>	<ul style="list-style-type: none"> • Explore properties of different objects using realia, multimedia resources and by means of simple experimentation.

3.6.2	I can identify purposes for which some common materials are used.	strong, weak, brittle, fragile, heavy, lightweight.	<ul style="list-style-type: none"> • Relate the properties and uses of these materials to everyday life experiences. • The students can identify items in class / school / home and state what they are used for e.g. windows are made from glass because we need to see through them; chairs can be made from wood, metal or plastic because they need to be strong enough to sit on; clothes are made from fabric because they need to be comfortable; baby toys are made from fabric because they need to be soft. • Research different scientists/inventors and find out about their discoveries and how these benefit us today.
3.6.3	I can find out about scientists who were responsible for discoveries on uses of material e.g. Margaret Knight (paper bag), Mary Anderson (windshield wipers), Maria Beasley (life raft), Charles Macintosh (raincoat).		
Learning Outcome 7 <i>How does planet Earth support life?</i>			
	LEARNING OUTCOMES <i>Children will be able to:</i>	KEY VOCABULARY	LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i>
3.7.1	<u>OUR PLANET</u>		

	I can identify water, air, rocks, soil and life forms as the constituents of our planet.	water, air, rocks, soil, life forms, support life.	<ul style="list-style-type: none"> Understand that planet Earth supports life and therefore we must take care of Earth's resources.
3.7.2	I can recognise and discuss the importance of saving water.	fresh water, sea water, contaminated water, water shortage, save/conserves water.	<ul style="list-style-type: none"> Identify practical ways of saving water.
3.7.3	I can explain the importance of the 4Rs: reduce, reuse, recycle and repair.	reduce, reuse, recycle, repair, refuse, rethink.	<ul style="list-style-type: none"> Identify practical ways of reducing, reusing, recycling and repairing waste as well as refusing items and rethinking everyday practices to safeguard our planet - Earth.
3.7.4	<u>THE WEATHER</u> I can talk about various weather conditions experienced in Malta throughout the year.	cold, hot, warm, cloudy, foggy, sunny, rainy, snowy, windy, stormy, thermometer, temperature,	<ul style="list-style-type: none"> Identify various weather conditions experienced in Malta, through multimedia resources, and relate these to their everyday life experiences.
3.7.5	I am able to distinguish between the four seasons with regards to weather conditions.	season, spring, summer, autumn, winter.	<ul style="list-style-type: none"> Observe weather changes, over a period of time, throughout different seasons.
Learning Outcome 8 <i>How do things move?</i>			
	LEARNING OUTCOMES <i>Children will be able to:</i>	KEY VOCABULARY	LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i>
3.8.1	<u>MAGNETS</u>		

	I can demonstrate that like poles of a magnet repel and unlike poles attract.	attract (pull), repel (push), like poles, unlike poles, bar magnet, ring magnet, horseshoe magnet, metal.	<ul style="list-style-type: none"> Explore and observe how a magnet reacts to different magnetic poles and different materials.
3.8.2	<u>SIMPLE MACHINES</u> I can investigate how simple machines work and give everyday examples.	lever, wheels and axle, hydraulic system.	<ul style="list-style-type: none"> Investigate how simple machines work and create a moving object. Go through the design process of researching, observing, testing, evaluating and improving the product.
3.8.3	I can find out about scientists who made discoveries related to how things move e.g. Leonardo da Vinci etc.	inventor, observe, experiment, ask questions.	<ul style="list-style-type: none"> Research different scientists/inventors and find out about their discoveries and how these benefit us today.
Learning Outcome 9 <i>What is there out in Space?</i>			
	LEARNING OUTCOMES <i>Children will be able to:</i>	KEY VOCABULARY	LEARNING OPPORTUNITIES <i>Children should be encouraged to:</i>
3.9.1	<u>THE SUN AND MOON</u> I can describe what a star is and identify the Sun as the nearest star to Earth.	Sun, star, gases, planet, solar system, orbit, source of light, source of heat.	<ul style="list-style-type: none"> Understand that the Sun is a star and its importance to life on Earth, through use of multimedia resources.
3.9.2	I can describe that the Sun is a source of light and heat.		

<p>3.9.3</p>	<p>I can describe that the moon is a rock without air and water.</p>		
<p>3.9.4</p>	<p>I can find out about the first moon landing.</p>	<p>Moon, rock, air, water, astronaut, spacesuit, dust, gravity, Neil Armstrong, Apollo 11.</p>	<ul style="list-style-type: none"> • Understand that the moon is a rock without air and water, through use of multimedia resources. • Research about the Apollo 11 mission.