Primary Science Level 6 Year 6 Learning Outcomes	
Learning Outcome code reference: *Example: 6.1.2 means Year 6 – Learning Outcome 1 – Sub-section 2.*	
Learning Outcome 1 ***What do Scientists do?*** Learning Outcome 1 *What do Scientists do?* will be integrated throughout the framework for Level 6 (Year 5 and Year 6).	
6.1.1	I can ask questions that can be investigated scientifically.
6.1.2	I can find out about a simple scientific idea.
6.1.3	I can use basic scientific knowledge to predict the outcome to an investigation.
6.1.4	I can carry out a simple practical investigation with the teacher's support, ensuring it is a fair test.
6.1.5	I can record observations in a simple format.
6.1.6	I can make simple conclusions from my direct observations and link these using key scientific terms.
6.1.7	I can apply scientific knowledge to practical situations.
6.1.8	I can through a role play exercise, act out simple stories about famous scientists.
6.1.9	I can give examples and explain how technology and science have improved life.
6.1.10	I can present information about some science occupations.

6.1.11	I can name, use and describe the purpose of a range of basic scientific resources referred to in the Learning Outcomes for Level 6 (Year 6).		
6.1.12	I can take basic measurements of size, mass and temperature, and express the reading using appropriate units.		
6.1.13	I can apply basic safety rules when working on an investigation.		
	Learning Outcome 2 ***How do we stay alive?***		
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
	<u>PLANTS</u>		
6.2.1	I can explain that plants need light, carbon dioxide and water to make food and that they produce oxygen.	**photosynthesis, light, sunlight, carbon dioxide, water, nutrients, oxygen.**	• Investigate/observe photosynthesis using simple everyday resources and multimedia resources.
6.2.2	I can investigate and give examples of the adaptations of plants to suit their environment.	**habitat, adaptation, cacti/succulents, ferns, leaves.**	• Observe different plants (potentially during a fieldwork activity) and note features which help plants adapt to their environment.
	<u>BODY SYSTEMS</u>		
6.2.3	I can describe, in simple terms, the main role of important human body systems		

	such as digestive, circulatory, respiratory, and nervous system.	**digestive system, teeth, saliva, stomach, small/large intestine; circulatory system, heart, blood, oxygen, veins, arteries; respiratory system, lungs, oxygen, carbon dioxide; nervous system, nerves, brain, organ.**	• Research and investigate the function of different body organs. • Refer to a body apron to identify and describe, in simple terms, the main role of such body organs. • Reference may be made to informative website www.kidshealth.org
Learning Outcome 3 ***How do we keep fit and healthy?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
6.3.1	FOOD GROUPS I can list the five main nutrients (proteins, carbohydrates, fats, minerals and vitamins) the human body needs	**proteins, carbohydrates, fats, vitamins and minerals, water, nutrients.**	• Use multimedia to research the role of nutrients in a healthy and balanced diet.

6.3.2 **6.3.3**	and explain their role and the importance of fibre in a healthy diet. I can interpret food labels and relate to identifying foods that should not be consumed in excess, including amount of sugar, saturated fats, salt, additives. I can apply my understanding of a balanced diet to suggest improvements to what I eat.	**energy, fat, saturated fat, sugar, fibre, salt, additives.** **food plate, food diary, nutrition, preservatives.**	• Analyse food labels of various types of food and learn how to identify the content of fat, sugar, salt and additives in food. • Evaluate whether the food item should be consumed on a regular basis or not. • Make an informed decision about food consumed. • Keep a food diary. • Suggest ways of improving and maintain healthy eating habits.
Learning Outcome 4 ***How do our senses help us gather information?***			
	LEARNING OUTCOMES	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES**

	Children will be able to:		*Children should be encouraged to:*
	<u>SOUND</u>		
6.4.1	I can describe, in simple terms, how the ear detects sound.	**ear canal, ear drum, vibration.**	• Use or create musical instruments using everyday resources to investigate sound.
6.4.2	I can explain when and how ears need to be protected.		• Explore and analyse how different musical instruments (real or created) produce high and low pitch sounds.
6.4.3	I can use or create sounds and explore different ways of changing the pitch of sound (high or low).	**high pitch, low pitch.**	• Use multimedia resources to investigate sound pitch.
	<u>LIGHT</u>		
6.4.4	I can understand that smooth and shiny surfaces reflect light better.	**mirror, reflection, surface, curved, flat, images, reversed image, multiple images, periscope.**	• Investigate reflection using mirrors and everyday resources.
6.4.5	I can investigate how different images are produced by flat or curved surfaces.		• Use everyday resources to investigate and make a periscope.
6.4.6	I can investigate how mirrors may be used to create reversed images, multiple images and to see behind things.		

6.4.7	I can build a periscope.		
Learning Outcome 5 ***What is energy?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
6.5.1 **6.5.2**	ENERGY SOURCES I can identify different types of renewable (solar and wind energy) and non-renewable sources (fossil fuels) to produce energy. I can describe how Malta generates its energy so far.	**fossil fuels (such as crude oil, coal and gas), solar energy, wind energy, generate, renewable, non-renewable, clean energy, power station, interconnector.**	• Research different types of energy and find out about renewable and non-renewable sources of energy. • Identify pros and cons of such energy resources. • Use multimedia resources and conduct research to describe how Malta generates its energy so far.
6.5.3 **6.5.4** **6.5.5**	ELECTRICTY I can explain the function of a switch in a circuit. I can make a circuit including a switch made from objects commonly found.	**circuit, switch, battery, wires, bulb.**	• Investigate electrical circuits and the role of a switch in a circuit, using simple everyday resources. • Use of multimedia resources to investigate switches.

	I can recognise and use common circuit symbols.		• Design and make their own switch using simple resources commonly found.
Learning Outcome 6 ***What are things made of?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
	<u>STATE OF MATTER</u>		
6.6.1	I can investigate and compare the properties of different states of matter (solids, liquids and gases).	**solid, liquid, gas, state of matter.**	• Investigate processes/changes in state of matter using simple everyday resources e.g. melting, freezing, boiling, evaporation, condensation.
6.6.2	I can observe and describe examples of freezing, condensation, evaporation, melting and boiling.	**freezing, condensation, evaporation, melting, boiling.**	• Give everyday examples of solids, liquids and gases and how these change state. • Find out about scientists such as Frank Epperson who invented Popsicles.

6.6.3 **6.6.4**	<u>CHEMICAL CHANGES</u> I can make some mixtures react to form new materials. I can observe and describe chemical reactions.	**chemical reaction, chemical change, mixture.**	• Use of multimedia resources to observe and explore change in state. • Explore chemical changes through simple activities such as baking and use of everyday resources such as mixing vinegar to bicarbonate of soda.
Learning Outcome 7 ***How does planet Earth support life?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
6.7.1	<u>HUMAN IMPACT ON THE ENVIRONMENT</u> I can explain that the environment is an ecosystem that can be harmed through	**environment, ecosystem, land, sea, air, light, pollution, habitats,**	• Research about the environment as an ecosystem and find out about threats to the environment through use of multimedia resources.

6.7.2	pollution, destruction of the natural environment, acid rain, overfishing and overpopulation. I can observe and describe how the sea is becoming polluted and its effect on marine life.	**micro-plastics, acid rain, overfishing, overpopulation, sustainability.**	• Discuss and debate how human activity has had an impact on the environment. • Explore practical and personal ways of conserving the environment.
Learning Outcome 8 ***How do things move?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
6.8.1 **6.8.2** **6.8.3** **6.8.4** **6.8.5**	<u>FORCES</u> I can investigate, through simple experimentation, the effect of gravity, as a force which pulls things to the Earth. I can show that air resistance exerts an opposing force to a moving object. I can demonstrate the effect of air resistance on differently shaped objects. I can apply principles of gravity and air resistance to everyday life.	**gravity, force, air resistance, mass, kilograms, push, pull, surface area, opposing force, streamline.**	• In simple terms, differentiate between mass and weight. Mass is the amount of matter that makes up an object (how much stuff is inside the object) and is measured in kilograms. Weight is the force acting on the object and is measured in Newtons. The weight of an object varies in relation to the force of gravity e.g. an object would weigh less on the Moon than on Earth because the

	I can research about scientists who have worked on gravitational theories e.g. Galileo Galilei, Isaac Newton.		Moon has a much weaker force of gravity than the Earth. • Investigate gravity and air resistance using simple everyday examples for comparison e.g. dropping a scrunched piece of paper and a flat piece of paper and noting which object touches the ground first. • Investigate concepts of gravity and air resistance through paper spinners. • Use multimedia resources to investigate gravity and air resistance. • Research simplified information about scientists such as Galileo Galilei and Isaac Newton and find out about their work on gravitational theories. • Observe and relate to gravity and air resistance through everyday examples such as a parachutist falling, streamline in objects such as cars and in nature such as birds etc.

Learning Outcome 9 ***What is there out in Space?***			
	LEARNING OUTCOMES *Children will be able to:*	**KEY VOCABULARY**	**LEARNING OPPORTUNITIES** *Children should be encouraged to:*
6.9.1 **6.9.2**	<u>THE MOON</u> I can describe the basic phases of the moon including new moon, first quarter, full moon, last quarter. <u>STARS AND GALAXY</u>	**phases of the moon, new moon, full moon, first quarter, last quarter, satellite.**	• Use simple everyday resources to investigate and/or demonstrate the different phases of the moon. • Use multimedia resources to find out about the different phases of the moon.

6.9.3 **6.9.4**	I can explain that the sun is one of many stars in our galaxy. I can research about the Milky Way galaxy. I can find out about scientists who made discoveries related to outer space e.g. Hans Lippershey (optical telescope), Caroline Herschel (discovered first comet) etc.	**sun, star, galaxy, Milky Way galaxy, solar system, space, scientists.**	• Use of multimedia resources to research the sun, the galaxy and the Milky Way galaxy. • Research simplified information about scientists who made discoveries related to outer space.