Sample Answers for Year 5 Resource Pack

<table>
<tr><th>Student's Pack page number</th><th>Activity reference</th><th>Sample Answer</th></tr>
<tr><td colspan="3">Learning Outcome 2: How do we stay alive?</td></tr>
<tr><td>Page 5</td><td>Activity 1</td><td>
<table>
<tr><th>Objects</th><th>Fire  </th><th>Fennel  </th><th>Spider  </th><th>Moon  </th><th>_____</th></tr>
<tr><td>Moves</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td></tr>
<tr><td>Reproduces</td><td></td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Needs food</td><td></td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Excretes</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Respires/ breathes</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Grows</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Can sense the world around</td><td></td><td>✓</td><td>✓</td><td></td><td></td></tr>
<tr><td>Living Or Non-Living?</td><td></td><td>✓</td><td>✓</td><td></td><td></td></tr>
</table>
</td></tr>
</table>

Page 6	Activity 2	**Living Things** : dog, cat, fish, flower, ant. **Non-Living Things** : ball, car, camera, chair, bicycle.
Page 9 & 10	Activity 3	**Vertebrates** : elephant, eagle, turtle, parrot, fish, lizard, horse, dog, lion, shark. **Invertebrates** : ant, snail, spider, worm, bee, ladybird, cockroach, butterfly, mosquito, crab.

Page 17	Activity 5	

<table>
<tr><td>Page 22</td><td>Activity 7</td><td>1.<table><tr><td>caterpillar</td><td>egg</td><td>butterfly</td><td>pupa</td></tr><tr><td>3</td><td>1</td><td>4</td><td>2</td></tr></table>2.<table><tr><td>adult bird</td><td>chick</td><td>juvenile bird</td><td>egg</td></tr><tr><td>4</td><td>2</td><td>3</td><td>1</td></tr></table></td></tr>
<tr><td>Page 23</td><td>Activity 8</td><td>1. Eggs
2. Tadpole
3. Froglet
4. Frog</td></tr>
<tr><td colspan="3">Learning Outcome 3 : How do we keep fit and healthy?</td></tr>
<tr><td>Page 31</td><td>Activity 1</td><td>In the picture where the sandwich is held in a paper bag, the bag reduces the spread of germs from the hands to the food. This keeps the food cleaner, especially if the hands are not freshly washed. Holding the sandwich without a tissue can spread bacteria or dirt from the hands to the food. This is less safe, especially after touching public places where hands might touch dirty surfaces.</td></tr>
<tr><td>Page 32</td><td>Activity 2</td><td>1. True — Our hands collect many bacteria from surfaces and washing them removes most of these germs.</td></tr>
</table>

		2. False — Washing hands with warm water and soap removes significantly more bacteria than using warm water alone, as soap helps break down and remove dirt and germs effectively. 3. False — Even if hands look clean, they can still carry invisible germs and bacteria, so washing is necessary to ensure proper hygiene. 4. True — Washing your hands after using the toilet helps remove harmful germs and bacteria that could cause illness if transferred to other surfaces or people. 5. False — You can pick up bacteria by touching other people, as bacteria and germs can be transferred through skin contact. 6. True — Scrubbing with soap for at least 20 seconds ensures that most germs and bacteria are removed from your hands before rinsing. 7. False — Not all bacteria are harmful; many bacteria are beneficial and play essential roles in processes like digestion and protecting against pathogens. 8. True — Washing your hands before eating helps remove germs and bacteria that could contaminate food and cause illness.
Page 34	Super Sneeze	**My Observations** 1. A correct prediction may include any/the following key vocabulary – germs, hygiene, spread, illness/disease. Please refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction. 2. As per observation.

		3. A correct prediction may include any/the following key vocabulary – germs, hygiene, spread, illness/disease. Please refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction. 4. As per observation. **My Conclusions** 1. Reference to spreading of germs/harmful bacteria/microbes. 2. After sneezing in a tissue, you should immediately dispose of the tissue in a trash bin and wash your hands to prevent the spread of germs. 3. Sneezing into a tissue is best for preventing the spread of infection because it effectively traps droplets and germs, whereas sneezing into your hand can transfer germs to your hand and other objects you touch.
Page 36	Prediction Results Conclusion	Drawing of dots representing mould on the bread as predicted by the students. Students should draw dots on the bread to represent the mould as per their observations. (Bread touched with dirty hands should have more mould over time compared to the other pieces of bread.) A correct conclusion should indicate that bread touched with dirty hands shows more mould or bacteria growth compared to bread touched with sanitized hands or not touched at all, demonstrating that unclean hands spread more germs, while clean or sanitized hands reduce contamination.

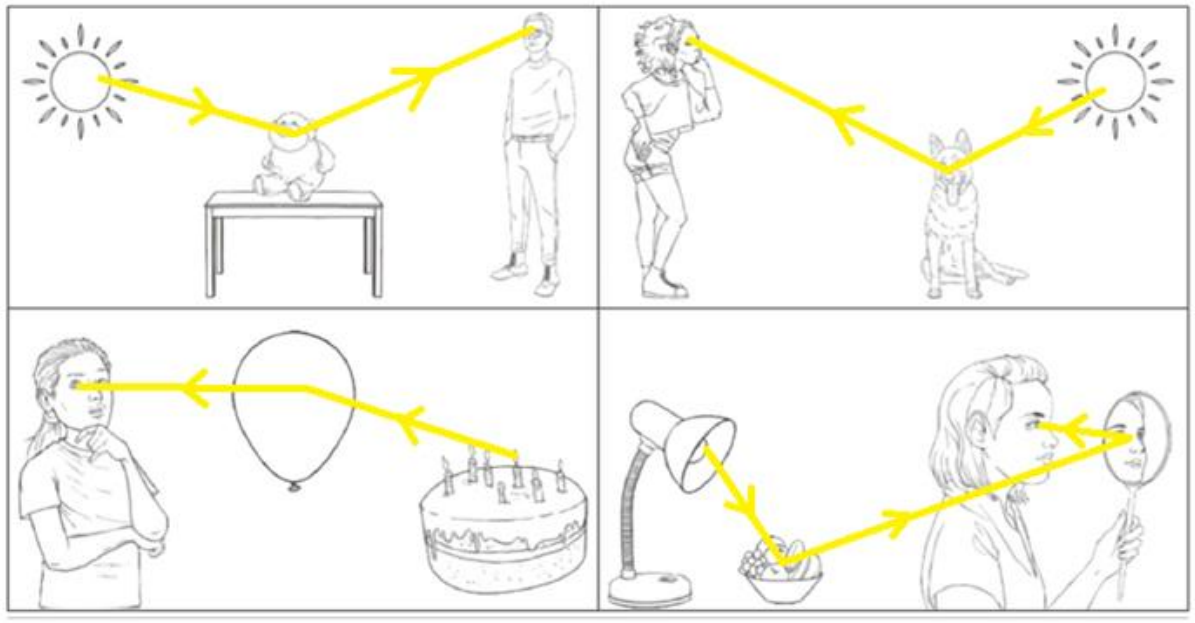
Learning Outcome 4: How do our senses help us gather information?		
Page 38	Activity 1	1. b, c 2. a, b 3. It causes the water to ripple and splash because the vibrations from the fork create waves in the water.
Page 39	Activity 2	A. 3, 2, 4, 1, 5 B. 4, 1, 3, 5, 2
Page 40	Activity 3	vibrates, air, sound wave, slinky spring
Page 41	Investigation 1	**Prediction** A correct prediction may include the key vocabulary words – vibrations, waves. Please refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction. **Observation** Reference to the fact that the louder the music, the stronger the vibrations , causing the rice or sprinkles to jump more. **Conclusion** speaker, air, vibrate, jump

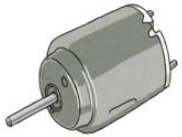
Page 42	Investigation 2	**Possible Questions for Investigation** A correct investigative question should refer to what happens to the sound heard if the string is kept loose tightly stretched or pinched. Accept any other relevant question related to the investigation. **Predictions from Investigation** Correct prediction may include the following words – vibrations, waves, clear sound.. Refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction. **Observations:** I can hear my partner clearly because sound vibrations travelled very well through the stretched string. When the string was pinched, it stopped the vibrations from traveling and the sound was heard quieter and muffled. I can hear my partner less clearly because sound vibrations travel less effectively through a loose string resulting in weaker sound.
Page 43	Conclusion	A. From this experiment, we can conclude that sound travelled clearly when the string was tight and not pinched. We could not hear the sound clearly when the string was pinched and loose. This is because loose strings do not transmit

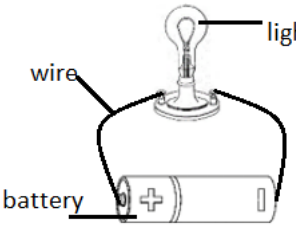
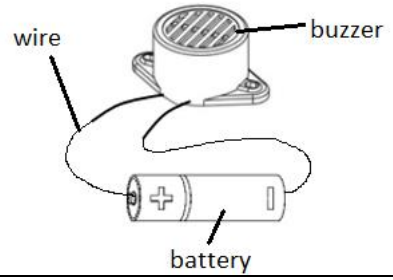
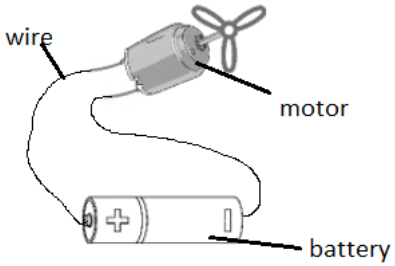
		vibrations well, and pinching the string stops the vibrations from traveling through it. B. vibrates, energy, solid, quickly, string, particles, ear, louder, distance
Learning Outcome 5: What is energy?		
Page 47	Activity 1 - a	**Luminous Objects**: sun, bulb, lightning, fire **Objects which reflect light**: chair, pen, boy, tree
Page 47	Activity 1 - b	The Moon is a non-luminous object because it does not produce its own light; it only reflects light from the Sun.
Page 47	Activity 1 - c	**Natural sources of light** The Sun, stars, fireflies, lightning, fire **Artificial sources of light** Light bulbs, flashlights, streetlights, LED lamps, candle
Page 48	Investigation 1	**Prediction** Students should predict how light travel and whether it will reach the other end or not. **Observation & Results** When the cards are in line, the light from the torch passed through the holes because light travels in a straight line, but when the cards are not in line, the light was blocked and did not pass through.

Page 49	Investigation 1	**Conclusion** Reference to the fact that light travels in straight lines and does not bend around corners.
Page 50	Investigation 2	**Prediction** 1. Students should predict whether they will see the object when looking through the tube explaining their reasoning. Kindly note that questions 1 – 3 found after the method are part of the prediction. Students should predict whether they will be able to see anything through the closed tube without holes and explain their reasoning. 2. Students should predict whether they will be able to see the object when a small hole is made at the top of the tube, close to their eyes, and explain their reasoning. 3. Students should predict whether they will be able to see the object when a small hole is made at the bottom of the tube and explain their reasoning.
Page 51	Investigation 2	**Observation & Results** Students should observe that they aren't able to see anything through the closed tube without holes because no light can enter the tube. They are not able to see the object when a small hole is made at the top of the tube, close to their eyes, as light does not

		reach the object. Students can see the object when a small hole is made at the bottom of the tube as light can enter through the hole, fall on the object and reflects into our eyes.
Page 51	Investigation 2	**Conclusion** A correct conclusion should refer to the fact that light is necessary for us to see objects. Objects can only be seen when light falls on an object and it is reflected into our eyes.
Page 52	Activity 2	a. B b. The diagram is **wrong** because light does not travel from our eyes to the object. Instead, light reflects off the candle and travels **into our eyes**, allowing us to see it. Light must enter the eyes to make vision possible. c. B, straight, corners

Page 53	Activity 3	
Page 58	Activity 1	Electric oven – heat energy Fan – kinetic energy Television – sound energy, light energy Washing machine – kinetic energy

Page 58	Activity 2: Circuits	Label the following components used to make up a circuit.  wires  buzzer  motor  bulb holder  battery holder  battery  crocodile clip  light bulb
Page 59	Investigation: Transfer of Energy (Prediction)	A correct prediction refers to the type of energy transfers take place in the investigation. The following words may be included: electrical energy, light energy, sound energy, kinetic energy, flow of electricity, complete circuit. Refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction.

<table>
<tr><td>Page 60</td><td>Investigation: Transfer of Energy (Results)</td><td></td><td> 
</td><td>Here the electrical energy is changed to <u>light energy.</u></td></tr>
<tr><td></td><td></td><td></td><td> 
</td><td>Here the electrical energy is changed to <u>sound energy</u>.</td></tr>
<tr><td></td><td></td><td></td><td> 
</td><td>Here the electrical energy is changed to <u>kinetic (movement) energy</u>.</td></tr>
<tr><td>Page 61</td><td>Investigation: Transfer of Energy (Conclusion)</td><td colspan="2">A correct conclusion should include the fact that when the components are attached correctly (leaving no gaps), a complete circuit is formed. This allows electricity to flow and be converted into different types of energy (light, sound, kinetic energy).</td></tr>
</table>

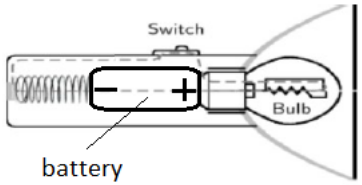
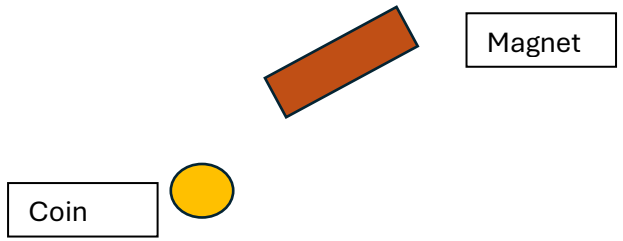
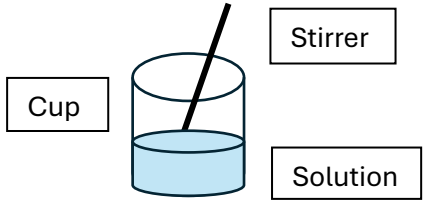
Page 61	Activity 2	a.  b.  c. i. light energy ii. sound energy iii. kinetic (movement) energy iv. heat energy d. i. In a light bulb electrical energy is changed into **light** and **heat** energy. ii. In **a buzzer**, electrical energy is changed into sound energy.
Learning Outcome 6: What are things made of?		
Page 65	Question	**A good investigative question makes direct reference to the materials being attracted to the magnet.** Ex. Which materials will be attracted by the magnet? (or any other question related to the investigation).

	Diagram	
Page 66	Prediction Results	In the column underneath prediction, students have to predict whether the objects in the list are magnetic or non-magnetic. Students have to tick whether the objects tested are magnetic or non-magnetic, ex iron paper clip magnetic, 1c coin magnetic, 10c coin non-magnetic, aluminium foil non-magnetic, etc.
Page 66	Conclusion	A correct conclusion shall include the objects attracted by the magnet in the list as magnetic while the ones that were not attracted as non-magnetic.
Page 70	What is a mixture?	Possible answers may include the following: Sea water, Milk, Concrete, Chocolate,

<table>
<tr>
<td>Page 71</td>
<td>Activity 2</td>
<td>
<table>
<tr><th></th><th>Mixtures</th><th>Solutions</th></tr>
<tr><td>Two or more substances combined together. One substance dissolves into the other. You cannot separate them easily.</td><td></td><td>✓</td></tr>
<tr><td>Two or more substances combined together. You can see the different parts and separate them easily</td><td>✓</td><td></td></tr>
<tr><td> 
Sand</td><td>✓</td><td></td></tr>
<tr><td> 
Lemonade</td><td></td><td>✓</td></tr>
<tr><td> 
Salad</td><td>✓</td><td></td></tr>
</table>
b. i. solute
ii. stir the mixture
</td>
</tr>
<tr>
<td>Page 72</td>
<td>Question</td>
<td>A good investigative question should make direct reference to the dissolving of solids in water. Ex. Which materials will dissolve in water? (Accept any other relevant question.)</td>
</tr>
<tr>
<td></td>
<td>Diagram</td>
<td> 
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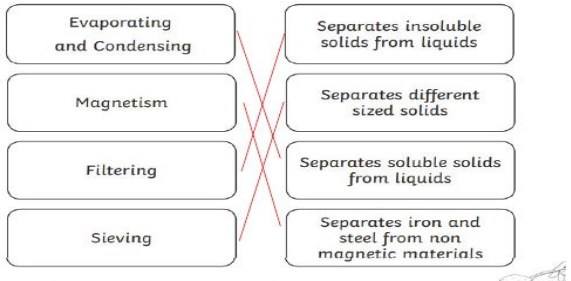
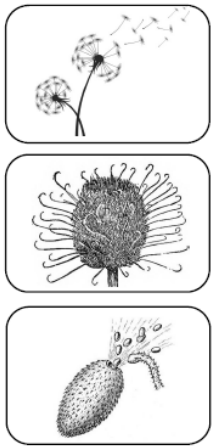
</table>

	Method	1. Fill each cup with the same amount of water. 2. Put an equal amount of the different solid materials in different cup. 3. Stir each mixture for an equal amount of time. 4. Observe what happened in each solution. Responses for fair testing shall include the following: • Same amounts of water and solid material used in each cup. • Same amount of stirring time for each cup.
Page 73	Prediction Results Conclusion	In the column underneath prediction, students have to predict whether the substances they are investigating are solutions, suspensions or mixtures. Students should write down whether the substances investigated are soluble or insoluble. A correct conclusion should state that some solid materials are soluble in water whilst other are not with reference to the substances used during the investigation.
Page 76	Activity 3	a. Property: Solubility Tool: Evaporating dish b. Property: Particle Size Tool: Sieve/tweezers or tongs

		c. Property: Magnetic Attraction Tool: Magnets d. Property: Particle size Tool: Sieve/ Spoons or tweezers
Page 77	Activity 3	 **Write in the process used to separate each mixture.** **Mixture** / **Process** salt + water — Evaporating and Condensing sugar + water — Evaporating and Condensing rice + pasta shapes — Sieving sand + water — Filtering flour + rice — Sieving paperclips + sawdust — Magnetism

Page 81	Activity 1	The pictures below show different types of seeds being dispersed. Match the seed to  Rambutan fruit sticks to the fur of animals and is carried away. Himalayan Balsam seeds explode when touched and shoot out up to 7m. Dandelion seeds are fluffy to be carried away easily by the wind.
Page 82	Activity 2	a) Scattering seeds around all the place is beneficial for plants as the seeds can survive and grow better when they are away from the parent plant. b) The dispersed seeds will have more area where to grow, they will be able to absorb more water and nutrients from the soil. This helps them grow stronger and bigger. c) In nature seeds are generally dispersed by, i. being spread by wind or water. ii. Carried away from the parent plant by attaching themselves to humans or animals. iii. Some plants manage to disperse their seeds via explosion eg. Himalayan Balsam.

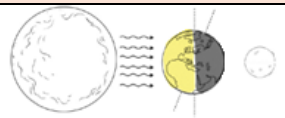
		Seeds that are carried by the wind are generally light so they can be blown away. Other seeds have hooks making it easy for the seed to attach itself to animal fur.
Page 83	Prediction	A correct prediction refers to seed dispersal methods. It may include any/the following key vocabulary: Seeds, seed dispersal, wind, animals, water, explosion/bursting. Please refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction.
Page 84	Observation Conclusion	As a correct response the student shall list the observation, made during the investigation. The following keywords may be used; dispersed, wind, explosion, bursting. As a correct response the student shall match the observations made in the investigation to real examples that happen during seed dispersal in nature.
Page 89	Prediction	A correct prediction must refer to a direct observation of the types of soil observed with a description using any of the following keywords: organisms, sand, sticks, leaves, seeds, organic matter, rocks. Please refer to Year 5 Continuous Assessment Rubric for further details on assessing the prediction.
Page 91	Results Part 1 Results Part 2	As a correct response the students shall draw each jar as a direct observation of the result of the investigation. Then They should describe what they see in each jar. The description may include the following key words: organic matter, water, clay, sand, gravel. As per observation

	Results Part 3	As per observation
Page 92	Conclusion	Key words shall be filled in the following order: soil, organic matter, food, nutrients, tunnels, water, air
Page 94	Activity 1a	Students may mention one of the following negative human's affects: - Pollution – Human activities that release pollutants into the air, water, and soil. Overuse of resources – Removing excessive natural resources such as overfishing and over harvesting. Over development and deforestation – the destruction of areas in which ecosystems thrive.
Page 94	Activity 1b i	Deforestation – Humans are developing land previously being a forest, this action is destroying the natural habitat of thousands of creatures.
Page 95	Activity 1b ii Activity 1b iii	Pollution – Rubbish and pollutants ends up in rivers and lakes disrupting the natural habitat of the living things in the area. Over development – Human activity, mainly construction changed the natural habitat of living things in the area.
Page 96	Sand dunes	Trampling in the sand dunes, extraction of sand, building on or near sand dunes and cutting down trees or shrubs in sand dunes can negatively affect the dunes. Trampling in the sand dunes can damage vegetation, which is essential for stabilizing the sand. Over time, trampling can lead to bare patches of sand, making dunes more

<table>
<tr><td></td><td></td><td>vulnerable to wind erosion. Extraction of sand removes not only the sand but also the vegetation and wildlife habitats that dunes support. Building on or near sand dunes (for housing, resorts) often leads to the destruction of dune ecosystems.</td></tr>
<tr><td>Page 97</td><td>Pollution</td><td>a. Light pollution, noise pollution, air pollution, water pollution
b. Using appliances which are not eco-friendly, high consumption of electricity and water, the use of private transport instead of public or by walk, contribute to environment pollution.</td></tr>
<tr><td>Page 98</td><td>Activity 2</td><td><table><tr><td>Deforestation</td><td>Pollution</td><td>Climate Change</td><td>Pollution</td></tr><tr><td>Climate Change</td><td>Over-development</td><td>Pollution</td><td>Pollution</td></tr><tr><td>Trampling *</td><td>Over-development</td><td>Pollution</td><td>Deforestation</td></tr></table>*Term to be used instead of ‘trespassing’.</td></tr>
<tr><td colspan="3">Learning Outcome 8: How do things move?</td></tr>
<tr><td>Page 107</td><td>Prediction</td><td>Students should predict whether they have a square, a tall rectangle or a wide rectangle shape.</td></tr>
<tr><td>Page 108</td><td>Results

Conclusion</td><td>As per investigation.

Students conclude their skeleton’s shape.</td></tr>
</table>

Learning Outcome 9: What is there out in space?		
Page 114	Activity 1	 a. Earth b. Sun c. Rotates/spins d. daytime, night-time.
Page 118	Activity 2	a. rotation b. revolution c. tilted d. days and night e. 365 days & 6 hours f. The Earth's rotation is what makes day and night on Earth. g. 24hours h. An imaginary line crossing horizontally in between the North and South Pole. i. Answer shall include any country in the Southern hemisphere with the reason being, that while in the Northern hemisphere it is Winter in Southern hemisphere it is Summer.

Page 119	Activity 3