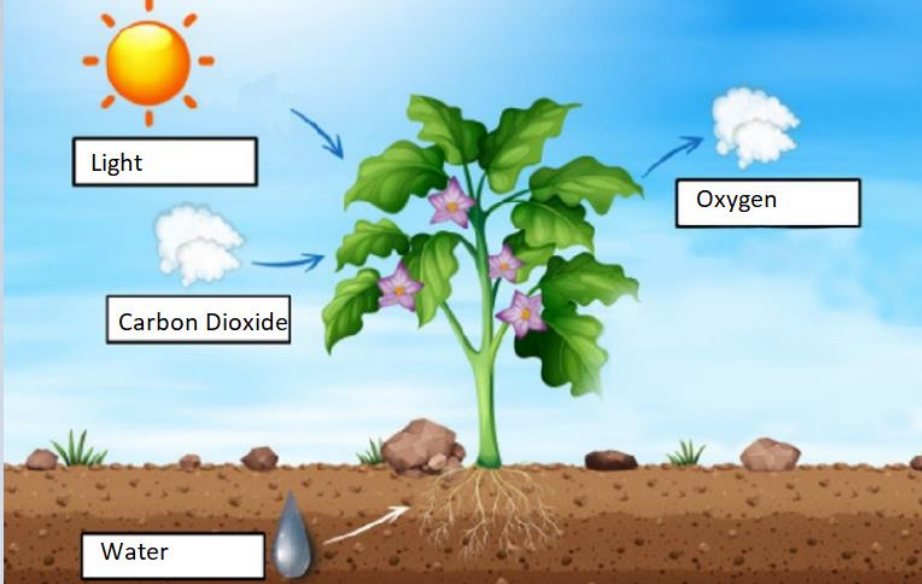


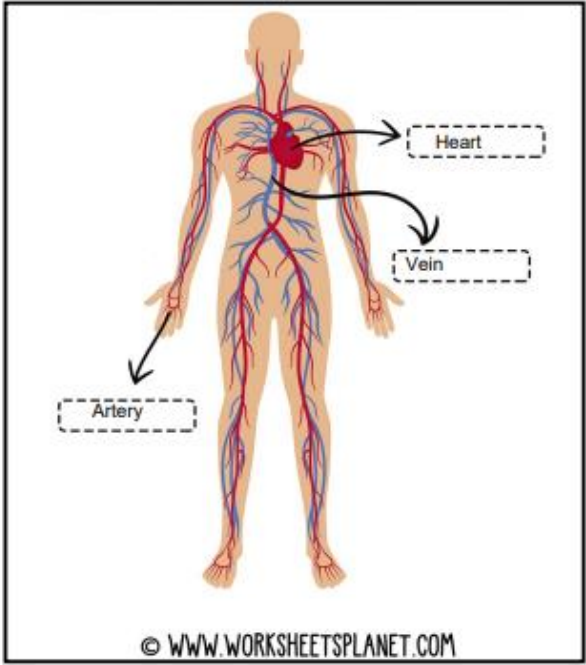
Sample Answers for Year 6 Resource Pack

Student's Pack page number	Activity reference	Sample Answer
Learning Outcome 2: How do we stay alive?		
Page 4	Activity 1A	 <p>The diagram illustrates the process of photosynthesis. A green plant with purple flowers is shown growing in brown soil. A sun in the sky represents the source of light. A cloud is labeled 'Carbon Dioxide' with an arrow pointing towards the plant. Another cloud is labeled 'Oxygen' with an arrow pointing away from the plant. A water droplet in the soil is labeled 'Water' with an arrow pointing towards the plant's roots. The plant's leaves are shown with small arrows indicating the intake of carbon dioxide and the release of oxygen.</p>

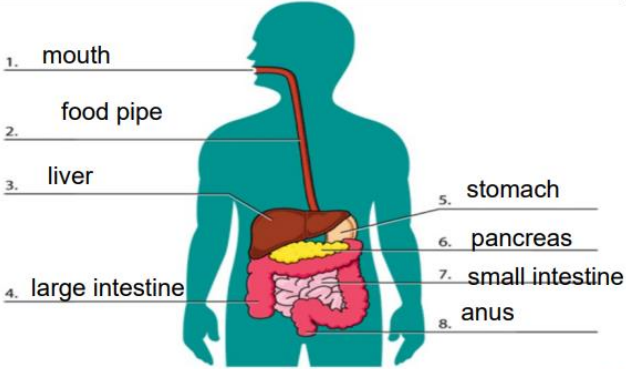


	Activity 1B	<ul style="list-style-type: none"> i. The plant needs sunlight, carbon dioxide and water. ii. It produces oxygen and sugars. iii. Most plants do not photosynthesise at night since they require light to do so.
Page 5, 6	Investigation: Producing Oxygen	<p>Prediction: A correct prediction may include any of the /or the following key vocabulary: <i>bubbles, photosynthesis</i></p> <p>Please refer to the Year 6 Continuous Assessment Rubric for further details on assessing the prediction.</p> <p>Results: Reference is made to oxygen bubbles seen in water.</p> <p>Conclusion: less, light, oxygen.</p>
Page 9	Research	Reference to the different plant adaptations to survive in that particular habitat.
Page 10	Activity 2	<p>Prickly Pears – In fields</p> <p>Maltese Rock Centaury – Dingli Cliffs</p> <p>Great Reed – Chadwick Lakes</p> <p>Sea Daffodil – Ramla Bay</p>
Page 11	Activity 2B	<ul style="list-style-type: none"> 1a. thick b. deep c. in the desert

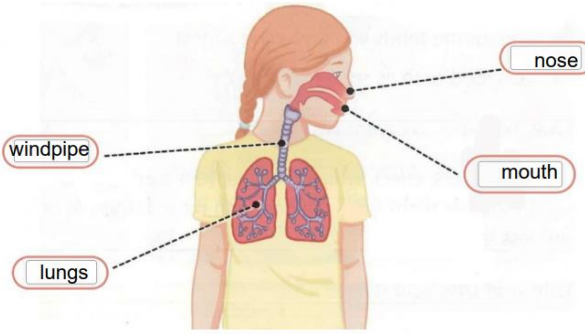


		<p>2a. needle-like b. in cones c. forests</p> <p>3a. sunny b. colourful c. thorns</p>
Page 13	Activity 3	<p>Activity 3: Label the diagram with the correct organ name.</p> <p style="text-align: center;"> Vein Artery Heart </p>  <p style="text-align: center;">© WWW.WORKSHEETSPLANET.COM</p>



Page 14	Prediction	<p>Prediction : A correct prediction may include any of the /or the following key vocabulary: heart, oxygen, blood</p> <p>Please refer to the Year 6 Continuous Assessment Rubric for further details on assessing the prediction.</p> <p>Results: Student’s measure of heart beats per minute.</p> <p>Conclusion: A correct conclusion should indicate that the pulse rate is lower at rest since less blood needs to be pumped around the body/is higher while exercising since the heart needs to pump more blood around the body.</p> <p>The conclusion should start as follows: From this investigation, it can be concluded/we can conclude that...</p>								
Page 17	Activity 5A	<p>Activity 5:</p> <p>A. Label the diagram using the word bank below.</p> <table border="1" data-bbox="920 807 1585 908"> <tr> <td>anus</td> <td>large intestine</td> <td>food pipe</td> <td>pancreas</td> </tr> <tr> <td>mouth</td> <td>small intestine</td> <td>stomach</td> <td>liver</td> </tr> </table>  <p>The diagram shows a human silhouette with the digestive system highlighted. Labels 1 through 8 point to the following parts: 1. mouth, 2. food pipe, 3. liver, 4. large intestine, 5. stomach, 6. pancreas, 7. small intestine, 8. anus.</p>	anus	large intestine	food pipe	pancreas	mouth	small intestine	stomach	liver
anus	large intestine	food pipe	pancreas							
mouth	small intestine	stomach	liver							



Page 18	Activity 5B	<p>B. Match the organ with its function:</p> <table border="1"> <tr> <td>A</td> <td>Mouth</td> <td>B</td> <td>Pushes the food down the food pipe (oesophagus).</td> </tr> <tr> <td>B</td> <td>Tongue</td> <td>D</td> <td>The mashed food is mixed with acid while moved further to form paste.</td> </tr> <tr> <td>C</td> <td>Food pipe (Oesophagus)</td> <td>A</td> <td>Food is chewed and mixed with saliva.</td> </tr> <tr> <td>D</td> <td>Stomach</td> <td>E</td> <td>Intestinal juices help to digest the food.</td> </tr> <tr> <td>E</td> <td>Small intestine</td> <td>C</td> <td>Is the passage of food from the mouth and throat to the stomach.</td> </tr> <tr> <td>F</td> <td>Large intestine</td> <td>G</td> <td>Waste is released.</td> </tr> <tr> <td>G</td> <td>Anus</td> <td>F</td> <td>Absorbs water and vitamins.</td> </tr> </table>	A	Mouth	B	Pushes the food down the food pipe (oesophagus).	B	Tongue	D	The mashed food is mixed with acid while moved further to form paste.	C	Food pipe (Oesophagus)	A	Food is chewed and mixed with saliva.	D	Stomach	E	Intestinal juices help to digest the food.	E	Small intestine	C	Is the passage of food from the mouth and throat to the stomach.	F	Large intestine	G	Waste is released.	G	Anus	F	Absorbs water and vitamins.
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G	Anus	F	Absorbs water and vitamins.																											
Page 19	Activity 6A	<p>Activity 6:</p> <p>A. Label the diagram below using the following word bank:</p> <table border="1"> <tr> <td>nose</td> <td>mouth</td> <td>lungs</td> <td>windpipe</td> </tr> </table>  <p>The diagram shows a human torso from the neck down to the chest. The respiratory system is highlighted in red. Labels with dashed lines point to the nose, mouth, windpipe (trachea), and lungs.</p>	nose	mouth	lungs	windpipe																								
nose	mouth	lungs	windpipe																											
Page 19	Activity 6B	<p>When we inhale the chest moves outwards allowing the chest to expand and fill with oxygen. When we exhale the lungs return to their smaller size to get rid of carbon dioxide.</p>																												



Learning Outcome 3: How do we keep fit and healthy?

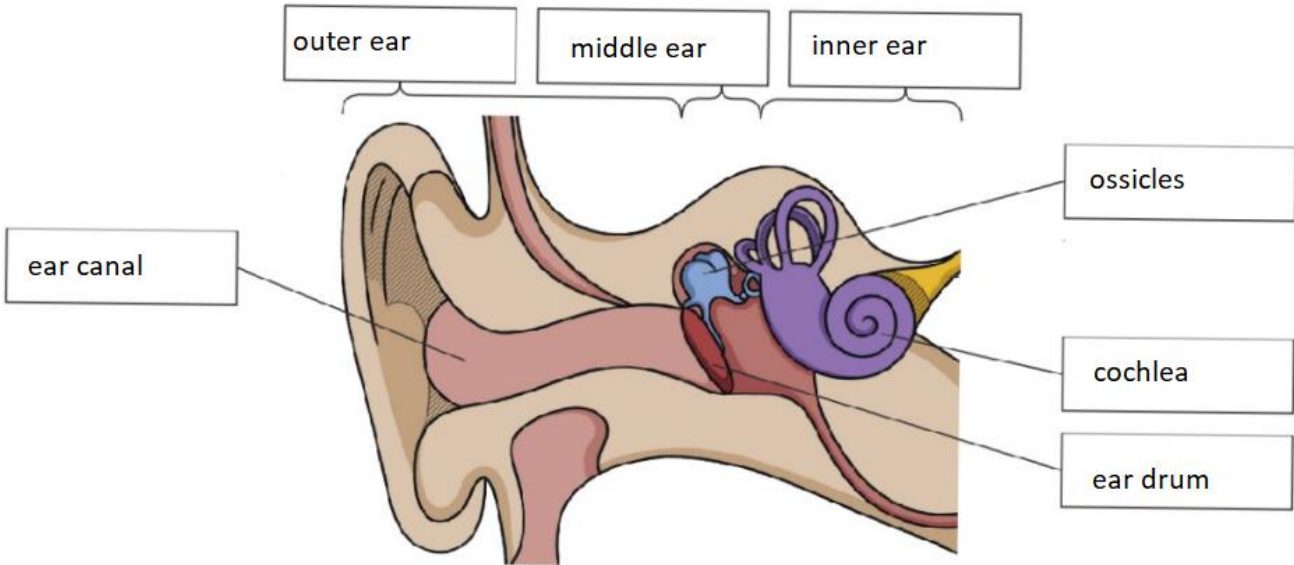
Page 24	Activity 1	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Vitamins and mineral Tomatoes Cabbage Apple Lettuce </td> <td style="width: 50%; vertical-align: top;"> Proteins Cooked chicken Egg Fish Cheese </td> </tr> <tr> <td style="vertical-align: top;"> Carbohydrates Spaghetti Loaf of bread Packet of cereal Bag of sweets </td> <td style="vertical-align: top;"> Fats Sausages Packet of crisps Chocolate bar </td> </tr> </table>	Vitamins and mineral Tomatoes Cabbage Apple Lettuce	Proteins Cooked chicken Egg Fish Cheese	Carbohydrates Spaghetti Loaf of bread Packet of cereal Bag of sweets	Fats Sausages Packet of crisps Chocolate bar
Vitamins and mineral Tomatoes Cabbage Apple Lettuce	Proteins Cooked chicken Egg Fish Cheese					
Carbohydrates Spaghetti Loaf of bread Packet of cereal Bag of sweets	Fats Sausages Packet of crisps Chocolate bar					
Page 26	f.	<p>The food that contains more protein and fibre and less sugar and fats. Moreover, foods that are grown naturally (whole foods) and do not contain artificial ingredients or additives, are healthier than foods that contain artificial ingredients or additives (highly processed foods).</p>				
Page 27	Activity 3.1	<p>Proteins – Chicken Fats – Vanilla cake Carbohydrates – White pasta Minerals and vitamins – Apple</p>				

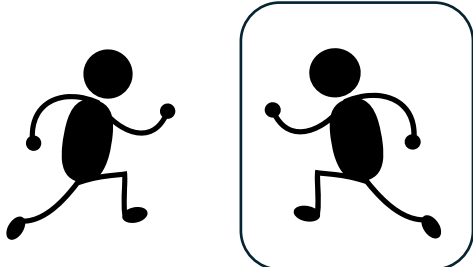


		Fibre – Wholemeal bread
Page 27	Activity 3.2	<p>Correct answers may refer to the following:</p> <p>a) Grated carrot- the carrot cake has lots of sugar.</p> <p>b) Oranges – it is more fibre and less sugar than orange juice.</p> <p>c) Apple – they have no added sugars and more fibre.</p> <p>d) Strawberry – it has more fibre and natural sugars and less calories.</p>
Page 28	Activity 3.3	<p>Accept any of the following answers:</p> <p>Helps Digestion: Fiber helps your tummy work better by making it easier to go to the bathroom. It keeps you from getting constipated.</p> <p>Keeps You Full: Foods with fibre, like fruits and vegetables, fill you up and can help you eat less junk food.</p> <p>Good for Your Heart: Eating fibre can help keep your heart healthy and lower bad cholesterol.</p> <p>Controls Sugar: Fiber helps keep your blood sugar steady, which is important for energy and staying healthy.</p> <p>Fights Diseases: Eating enough fibre can lower the chances of getting sick from diseases like diabetes and heart problems.</p>

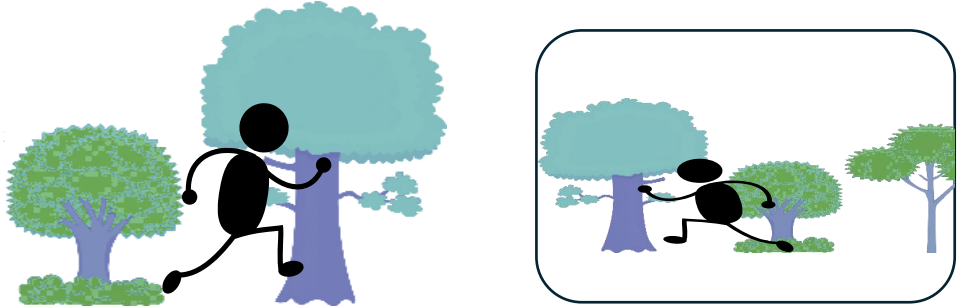
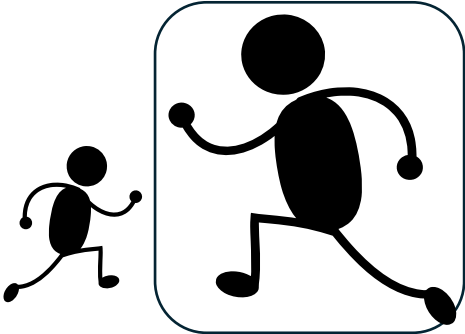
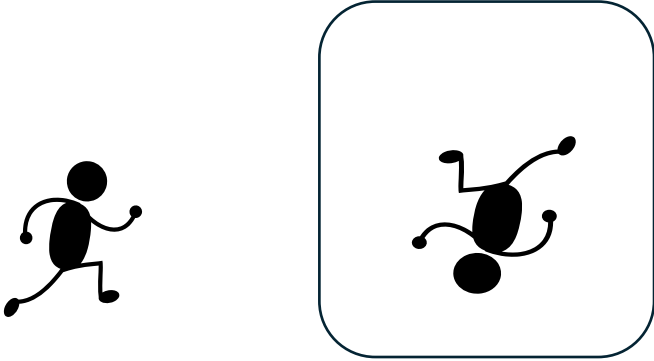


Learning Outcome 4: How do our senses help us gather information?

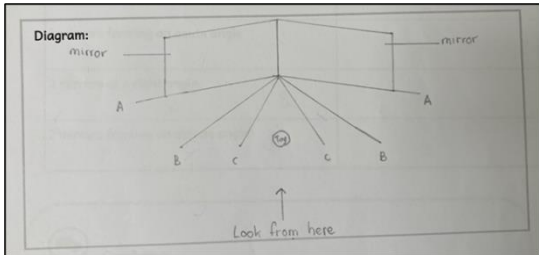
<p>Page 31</p>	<p>Activity 2</p>	<p>Label the different parts of the ear. Use the word bank under the picture.</p>  <p>The diagram shows a cross-section of the human ear. It is divided into three main regions: the outer ear (pinna and ear canal), the middle ear (containing the ossicles and ear drum), and the inner ear (containing the cochlea). Labels with leader lines point to the ear canal, ossicles, cochlea, and ear drum. Brackets above the diagram group the parts into 'outer ear', 'middle ear', and 'inner ear'.</p>
<p>Page 35</p>	<p>Prediction</p>	<p>Question: Direct reference to material in relation to absorption of sound. Prediction: Please refer to the Year 6 Continuous Assessment Rubric for further details on assessing the prediction. Reference is made to material and how well it absorbs sound.</p>
<p>Page 36</p>	<p>Conclusion</p>	<p>materials; absorbing; ear protection; protect; environments.</p>

Page 38	Comprehension	<ol style="list-style-type: none"> 1. Ear protection provides a barrier between the ear and the loud sound. It is important because it prevents damage to our ears. 2. It is measured in decibels (dB). 3. 85 dB. 4. Attending concerts with loud music, power tools. 5. Lowering the volume, limit use of headphones. 6. Our ears are damaged. 7. It means that the damage caused cannot be reversed. 8. Wear ear muffs. 9. Shooting ranges, motor sport event. 10. Ear plugs and ear muffs.
Page 41, 42	Prediction Observation Conclusion	higher; lower Students should comment on how high or low pitched (direct or indirect) the sound is heard when the string is plucked. higher, lower
Page 45	Activity 1: Picture Answer	



		The image appears to be the same size and colour as the object but reversed. They appear to stand at the same location.
Page 46	Activity 2: Picture	 <p>The object and image are not identical. The image appears the right-side up (upright), smaller, and you can see a wider view, more area around you.</p>
	Activity 3: Picture	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>A</p>  </div> <div style="text-align: center;"> <p>B</p>  </div> </div>



		<p>A: The object and image are not identical. The image appears closer, larger and upright (right-side up). B: Students may also observe that as you move the object away from the mirror, the image may flip upside down (inverted).</p>
Page 47	Activity 4A	<ol style="list-style-type: none"> 1. This concave mirror is typically used for tasks like shaving and applying make-up, where you need a close-up view since concave mirrors can produce magnified images. 2. Dental mirrors help dentists see areas of the mouth that are difficult to view directly, such as the back of the mouth and behind teeth. Concave mirrors in dental mirrors give dentists an upright magnified reflection of the mouth.
Page 47	Activity 4B	<ol style="list-style-type: none"> 1. Convex mirrors are used in cars' side-view mirrors to help drivers monitor traffic alongside and behind them. Since convex mirrors make objects appear small, they can provide a wider field of view. 2. Traffic mirrors are used in roads and parking areas as they allow drivers to see around obstacles and help prevent accidents.
Page 48	Question Diagram	<p>Reference to how mirrors may be used to create images.</p> 



	Prediction	Use Continuous Assessment rubric to assess prediction. Prediction may include what students may see in the mirror when using one mirror and when using two mirrors, placed at different angles.
Page 49	Results Table Conclusion	One straight mirror – 1 image When using two mirrors, the smaller (acute) the angle between the two mirrors, the larger the number of images seen. The larger (obtuse) the angle between the two mirrors, the less images seen. Students should make reference to the fact when one mirror is used, only one image is seen. Whereas when two mirrors are used, the wider the angle the less number of images are seen and the narrower the angle, the more images are seen.
Page 52	Fill in	Periscope
Page 52	Diagram	



Learning Outcome 5: What is energy?																										
Page 56	Activity 1	Renewable – Solar panels, Wind turbines Non- renewable - Coal powered Power Plant, Oil powered Power Plant, Gas powered Power Plant																								
Page 56	Activity 2	<table border="1"> <thead> <tr> <th></th> <th>Electricity Generation Method</th> <th></th> <th>Pros</th> </tr> </thead> <tbody> <tr> <td rowspan="3">A</td> <td rowspan="3">Wind Turbines</td> <td>C</td> <td>Are used and constructed anywhere.</td> </tr> <tr> <td>B</td> <td>Produce clean energy and are affordable for private use.</td> </tr> <tr> <td>A</td> <td>Produce clean energy day and night.</td> </tr> <tr> <td rowspan="2">B</td> <td rowspan="2">Solar Panels</td> <td colspan="2">Cons</td> </tr> <tr> <td>B</td> <td>Can produce energy only during daytime and for best efficiency on a clear day.</td> </tr> <tr> <td rowspan="2">C</td> <td rowspan="2">Fossil Fuels Power Plants</td> <td>A</td> <td>Can be an eyesore, noisy and dangerous to some wildlife.</td> </tr> <tr> <td>C</td> <td>Air around this type of plant is mainly polluted with links to asthma and also heart and lung problems.</td> </tr> </tbody> </table>		Electricity Generation Method		Pros	A	Wind Turbines	C	Are used and constructed anywhere.	B	Produce clean energy and are affordable for private use.	A	Produce clean energy day and night.	B	Solar Panels	Cons		B	Can produce energy only during daytime and for best efficiency on a clear day.	C	Fossil Fuels Power Plants	A	Can be an eyesore, noisy and dangerous to some wildlife.	C	Air around this type of plant is mainly polluted with links to asthma and also heart and lung problems.
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C	Fossil Fuels Power Plants	A	Can be an eyesore, noisy and dangerous to some wildlife.																							
		C	Air around this type of plant is mainly polluted with links to asthma and also heart and lung problems.																							
Page 61	Everyday Electronic Devices	Electric kettle, microwave, fan, laptop, radio, tablet, hairdryer																								



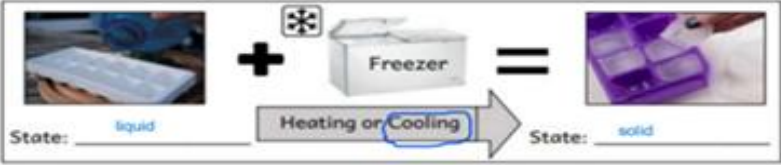



Page 65	Motor ON circuit		
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Learning Outcome 6: What are things made of?

Page 70	Activity 1	<table border="1"> <thead> <tr> <th></th> <th>State</th> <th>Particle Arrangement</th> <th>Particle Properties</th> <th>Material Properties</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td style="text-align: center;">SOLIDS</td> <td style="text-align: center;"> </td> <td> Particles are closely packed in a regular pattern. They vibrate on the spot. </td> <td> Keeps the shape unless a force is applied to it. Remains the same volume. </td> </tr> <tr> <td>2.</td> <td style="text-align: center;">LIQUIDS</td> <td style="text-align: center;"> </td> <td> Particles are close together but random. They can move over each other. </td> <td> Takes the shape of the container it is in . Stays the same volume </td> </tr> <tr> <td>3.</td> <td style="text-align: center;">GASES</td> <td style="text-align: center;"> </td> <td> Particles are spread out and can move about quickly in all directions. </td> <td> Does not keep its shape. Can spread out to fill the space it is in. </td> </tr> </tbody> </table>		State	Particle Arrangement	Particle Properties	Material Properties	1.	SOLIDS		Particles are closely packed in a regular pattern. They vibrate on the spot.	Keeps the shape unless a force is applied to it. Remains the same volume.	2.	LIQUIDS		Particles are close together but random. They can move over each other.	Takes the shape of the container it is in . Stays the same volume	3.	GASES		Particles are spread out and can move about quickly in all directions.	Does not keep its shape. Can spread out to fill the space it is in.
	State	Particle Arrangement	Particle Properties	Material Properties																		
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Page 75	Activity 2	<ul style="list-style-type: none"> • Evaporation  • Condensation  • Freezing  • Melting 
Page 76	Activity 3a	The apple will turn brown, due to the apple being exposed to air. It is a chemical change.
Page 77	Activity 3b	The nail will rust, turning reddish-brown as rust forms. It is a chemical change. Saltwater accelerates the rusting process.



	Question	A correct investigative question should refer to what happens when vinegar and baking soda are mixed e.g. What happens when vinegar and baking soda are mixed? or What happens when two substances are mixed? or What is produced when a chemical reaction takes place?
Page 78	Prediction	A correct prediction may include any of the /or the following key vocabulary: <i>chemical reaction, chemical change, inflate, bubbles, fizzy sound, foam effect.</i> Please refer to the Year 6 Continuous Assessment Rubric for further details on assessing the prediction.
	Results	Students observe that when vinegar and bicarbonate of soda are mixed, bubbles of gas form and the balloon inflates.
	Conclusion	Reference to the fact that when vinegar and bicarbonate of soda are mixed, a chemical reaction takes place, and a gas is released. This gas is carbon dioxide.
Learning Outcome 7: How does planet Earth support life?		
Page 81	Activity 1	Examples include: light pollution, overdevelopment (building cities, roads), global dimming, global warming, peat bog destruction, plastics in the ocean, landfill, acid rain, deforestation, agriculture (loss of land, pesticides), quarrying and mining, hunting, overfishing.
Page 82	Activity 2	Refer to Power Point Presentation 6.7.2 Causes and Effects of Marine Pollution, in the Teacher's Resource Pack.



Activity 3: Effects of negative human intervention

The scenario cards below are examples of pollution mainly by acid rain, micro-plastic, oil spill, overfishing and overpopulation. Write down the type of human intervention beneath each scenario card.

Rain that has been made acidic by certain pollutants in the air.	Oil destroys the seabirds' protective layer of feathers, destroying its insulating effect.	More people on land often result in more waste and emissions that contribute to air and water pollution.	Nitrogen from polluted rain in our waters is partially responsible for declining fish populations.
Acid rain	Oil Spills	Over Population	Acid rain

Marine animals can eat these as they mistake them for food. They can cause harm to marine life and also humans.	Catching too many fish can effect fisherman's income as there are less fish available and the cost to catch fish rises.	Small plastic pieces less than 5mm long which can be harmful to our ocean and aquatic life.	When too many fish are caught, it imbalances the food web causing loss of marine life.
Micro-plastics	Overfishing	Micro - plastics	Overfishing

As the human population grows, more land is developed for houses.	Cleaning this up is very costly and the natural environment can be contaminated.
Over Population	Oil Spills

Reduce: buy things which can be USB charged, do not over buy food and make use of leftovers, choose items with less packaging.
Reuse: give clothes to charity, use jars and plastic containers for storage.
Recycle: sort out trash at home and dispose of it correctly, take things which cannot be disposed of at home to bulk refuse, take out glass for collection, place batteries in the special bins found at school, local councils and other places.
<https://solarschools.net/knowledge-bank/sustainability/reduce-reuse-recycle>



Learning Outcome 8: How do things move?

Page 91

Activity 1a

Activity 1:

A. Answer the table below by ticking whether the statements are true or false.

	True	False
On the moon your mass is less than that on Earth.		✓
Mass is the measurement of how much matter something contains.	✓	
You would weigh more on Jupiter.	✓	
Weight is the force put on an object by gravity.	✓	

Page 91

Activity 1b

B. Look at the pictures below. Cross out the ones that are not correct.



Diagram A

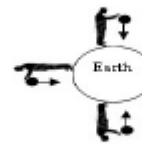


Diagram B

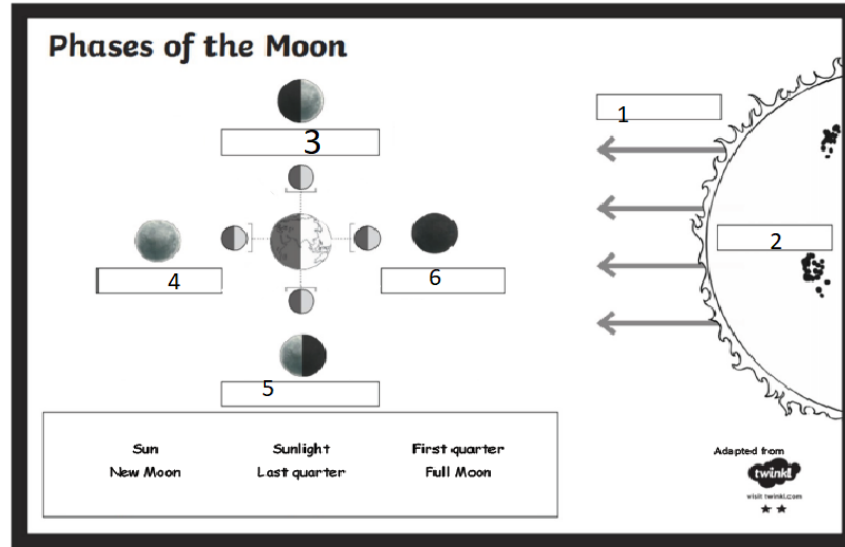


Diagram C



Page 93	Investigating Spinners	<p>Prediction : A correct prediction may include any of the /or the following key vocabulary: <i>surface area, air resistance , gravity, force, air resistance, push, opposing force.</i></p> <p>Please refer to the Year 6 Continuous Assessment Rubric for further details on assessing the prediction.</p>
Page 94	Conclusion	Reference to the fact that the larger the area of the spinner’s blades, the more the air resistance acting on the spinner, and the slower the spinner will fall.
Page 96	Activity 2	<p>1.Since racing cars go very fast, they need a parachute to help it slow down faster than brakes alone could do. The parachute opens and catches a lot of air. This air resistance helps it slow down much faster.</p> <p>2.The helmet has a smooth, streamlined shape that helps the air flow more smoothly over the cyclist’s head. The cyclist is also wearing a tight suit, reducing the amount of air resistance he faces compared to loose clothing.</p>
Learning Outcome 9: What is there out in space?		
Page 102	Activity 1	1.False 2. False 3. True 4. True 5. True 6. False





1.Sunlight 2. Sun 3. First Quarter 4. Full Moon 5. Last Quarter
6. New Moon

Updated November 2024.

