Ensures Distinction (Answers)
Science
Grade 5

Pg 8 Ex 1.0
1. C 2. D 3. C 4. D 5. A

Pg 9 Ex 1.1
1. temperature 2. alcohol 3. body 4. rises
5. steam 6. digital

Pg 9 Ex 1.2 A
1. water vapour/steam
2. Because the surface of the glass pane is cold and when water vapour gets into contact with a cold surface it cools down to form water droplets.
3. Evaporation.
4. 100°C
5. Condensation.
6. Because water vapour will no longer condense since the glass pane will be hot.

Pg 10 Ex 1.2 B
1. When the sea water is heated by the sun, it evaporates and salt is obtained.
2. Because at Tamarin the climate is hot and dry.
3. To dry clothes. / It helps in the process of evaporation.

Pg 10 Ex 1.3
1. Snow
2. To chill drinks. / To relieve pain. /
   To practise sports like skiing and skating.
3. Hard / Cold / Slippery
4. Freezing
5. At 0°C

Pg 11 Ex 1.4
1. Snow / ice
2. The temperature is very low on top of high mountains.
3. Because it is not high enough.

Pg 11 Ex 1.5
1. Melting
2. Condensation
3. When water vapour gets into contact with a cold surface, it condenses to form water droplets.
4. Put the beaker in the freezer.

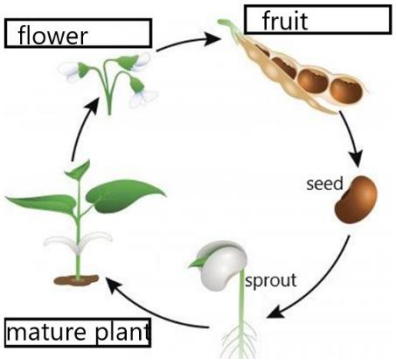
Pg 12 Ex 1.6
1. (a) solid state (b) liquid state
2. (a) below 0°C (b) 100°C
3. Pour some hot water in the beaker. /
   Heat the beaker using a burner.
4. The water will evaporate the become water vapour.

Pg 12 Ex 1.7
1. B – condensation C – precipitation
2. It helps in the formation of clouds.
3. Water cycle helps to provide fresh water to all living things in the form of rain.

Pg 15 Ex 2.0
1. C 2. D 3. A 4. B

Pg 15 Ex 2.1
1. Germination of a seed is when a seed sprouts to become a new plant.
2. Air/Water/Suitable temperature.
3. root → shoot → leaf
4. The roots come our first.
5. From the seed.
6. Because the leaf will manufacture food for the plant.
7. To hold the plant firmly in the soil./
   To absorb water and minerals from the soil.
8. 3/2/5/1/4

Pg 16 Ex 2.2
1.



2. water/minerals
3. Air/Water/Sunlight/Minerals or nutrients from the soil.
4. By wind/ by splitting of fruit.
5. Hydroponic plants.

Pg 17 Ex 2.3
1. Beaker B
2. Because it has been watered.
3. Yes /
   Because seeds do not germinate at a cold temperature.

Pg 18 Ex 2.4
1. Seed Y.
2. Seed Z.
3. Because it does not get water.
4. Seeds need water to germinate.
5. Because it is not getting minerals from the water.

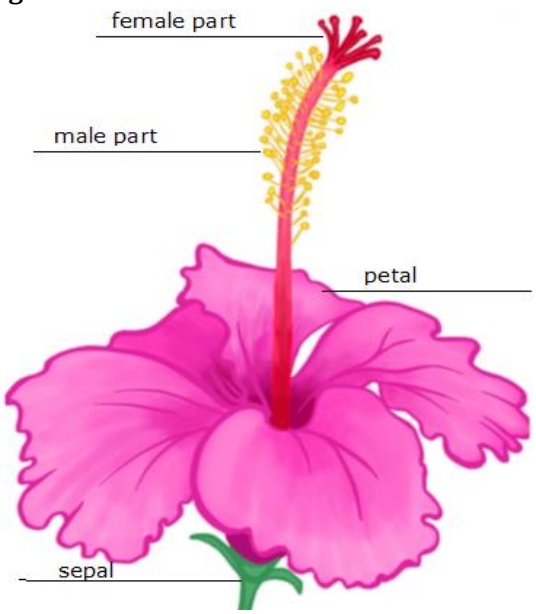
Pg 23 Ex 2.5

a) hard b) balsam c) juicy d) soft
e) grass f) flowering plant g) non-flowering

Pg 23 Ex 2.6

1. petal 2. juicy 3. moss 4. fruit
5. avocado

Pg 24 Ex 2.7



Pg 24 Ex 2.8

1. (i) A – female part B – male part
   (ii) Part B/male part
   (iii) Part A/female part
2. The sepal 3. The petals
4. Litchi tree/mango tree/papaya
5. moss/ferns/algae 6. rose/lavender

Pg 25 Ex 2.9

1. Pollination
2. The transfer of pollen from the male part to the female part of flowers by pollinators.
3. Bee
4. Butterfly
5. The flower will become a fruit.

Pg 31 Ex 3.0

1. C 2. B 3. D 4. C

Ex 3.1

Land Habitat	Aquatic Habitat
flame tree	duckweeds
filao tree	lotus
asparagus	sea lettuce
yucca	eel grass

Pg 31 Ex 3.2

 **in the soil**	 **in sand**
 **in deserts**	 **on trees**
 **in fresh water pond**	 **in sea water**
 **wetlands**	 **on rocks**

Pg 32 Ex 3.3

1. Taro leaves 2. moss 3. sunlight
4. decorative 5. brackish

Pg 33 Ex 3.4

1. Habitat
2. Wetlands are wet areas where the soil is sometimes or always under water.
3. Les Salines/Pamplemousses
4. Mangroves/Bulrush/Taro leaves
5. Mushroom.
6. On trees/ On rocks
7. Grasslands are large areas of grassy land with few trees.
8. Because ferns grow well in humid, damp and shady places.

Pg 34 Ex 3.5

1. Deserts.
2. The climate is hot and dry.
3. Because of its thick stem which stores water and its spines.

4. To prevent animals from eating the juicy stem of the cactus.
5. Yucca/Aloe

Pg 34 Ex 3.6
1. Fresh water ponds
2. The tall stem of the water lily grows in the muddy soil till the leaves reach the surface of water.
3. To float on water.
4. To get sunlight.

Pg 35 Ex 3.7
1. They both grow in water/aquatic habitat.
2. Water lettuce grows in fresh water but sea lettuce grows in sea water.
3. Air dissolved in water.

Pg 37 Ex 3.8
1. The right amount of water, a good supply of air, sunlight and minerals from the soil.
2. We don't have to buy vegetables from the market.

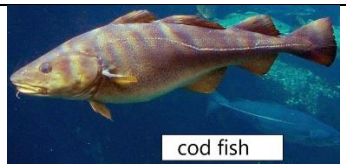
Ex 3.9
1. The fuel has spilled in the ocean.
2. Water/aquatic habitat of plants.
3. The fuel prevented the mangroves from growing well since it contains harmful/poisonous substances.

Pg 38 Ex 3.10
1. Oil spill and deforestation.
2. To build houses. / To build roads and motorways.
3. Natural forests have been declared as nature reserves.
4. We have no right to uproot young plants. / We have no right to cut down trees. / We have no right to put fire in forest.

Pg 45 Ex 4.0
1. B 2. C 3. D 4. A

Pg 45 Ex 4.1

 **on land**	 **on trees**

 **in deserts**	 **in sea water/ocean**
 **in sand**	 **in the soil**
 **in forests**	 **in wetlands**

Pg 46 Ex 4.2
1. Habitat.
2. Food / Shelter / Protection from dangers.
3. Amphibians.
4. To provide them with a safe place to protect their young ones.
5. (a) Swans / Penguins (b) Webbed feet help animals to float on water and swim very well.
6. (a) By eating other animals. (b) The lion has lungs which help it to breathe air from the atmosphere.
(c) It has gills which enable it to breathe dissolved air in water. / It has fins and a tail to help it swim in water.
7. Worms help to increase the amount of water and air that gets into the soil.

Pg 47 Ex 4.3
(a) Duck / Toad / Crayfish (b) To get food from wetlands. / To eat fish from wetlands.

Pg 48 Ex 4.4
(a) Polar bear / Walrus
(b) It helps penguins to hide from predators and hunt prey.
(c) To stay warm in cold regions.

Pg 52Ex 4.5

 **Mauritius Kestrel**	 **Rodrigues Warbler**

 **Round Island Gecko**	 **Mauritius Bulbul**
 **Rodrigues Fody**	 **Mauritius Fody**

Pg 52 Ex 4.6

1. Endemic means that can be found in only one place or region and nowhere else.
2. Boa / Gecko
3. (i) Dodo / Mauritius Blue pigeon (ii) solitaire/

4. (a) Endemic (b) Endangered
5. Insects and fresh seeds or leaves.
6.

 Solitaire - **extinct**	 Sparrow - **exotic**
 Mauritius Fruit Bat - **endemic**	 Round Island Boa - **endemic**

7. Because their natural habitats have been destroyed.
8. Forests have been cleared to grow crops, to build houses, to build roads/motorways, to construct factories/industries.
9. (a) Macchabée forest / Vallée de Ferney.
   (b) Grande Montagne Nature Reserves /
   François Leguat Giant Tortoises Nature Reserve.
   (c) To protect the habitats of endemic animals.
10. (a) Exotic (b) La Vanille Nature Park.
11. The Mauritius Wildlife Foundation.
12. To prevent them from being extinct.

Pg 59 Ex 5.0

1. B 2. C 3. A 4. D 5. D

Pg 60 Ex 5.1

1. banyan / pandanus / mangroves
2. To hold the plant firmly in the soil.
3. Roots hold the plant firmly in the soil. /
   Roots absorb water and minerals from the soil. /
   Roots bind the top soil and prevent it from being washed away. /
   Roots store food for the plant.
4. The washing away of top fertile soil.
5. Heavy rainfall / Strong winds.
6. Overgrazing by animals / Forest fires / Deforestation.
7. The washed away soil which is deposited at the mouth of rivers and seabed affects marine life. /
   The washed way soil blocks drains which causes floods. / The land becomes rocky and less fertile. /
   It causes landslides.
8. Roots bind the top soil and prevent it from being washed away.
9. Trees help to reduce flooding and soil erosion near rivers during heavy rainfall.
10. Because the roots of muguet and vetiver help to prevent the soil from being washed away easily.
11. The dense vegetation reduces the force of falling water by preventing rain from falling directly on the ground.
12. Planting trees on sloping lands. /
    Building of terraces on sloping lands. /
    Placing stones near erosion prone areas.
13. (a) Terraces stop the rapid flow of water during heavy rainfall and prevent the soil from being washed away.
    (b) It helps farmers to get more land for growing crops. /
    It helps farmers to get a better yield.
14. The roots bind the top soil firmly.
15. Roots of trees are stronger than roots of grasses which help to prevent soil erosion.

Pg 62 Ex 5.2

1. Test tube B.
2. (a) No.
   (b) The oil in the test tube will prevent the water from evaporating.
3. Roots of plants absorb water.

Pg 65 Ex 5.3

1. roots 2. hard 3. herbs 4. juicy 5. shrubs

Ex 5.4

1. The stem holds the branches, leaves, flowers and fruits. /

It carries water and minerals from the roots to the other parts of the plant. /
It holds the leaves so that they receive a lot of sunlight. /
The food made by the plant is carried to the other parts of the plant by the stem.

2. The stem of shrubs are hard but not very thick but the stem of trees are hard and thick.
3. thyme / mint / parsley

Pg 65 Ex 5.5

 mango plant - **tree**	 rosemary - **herb**
 rose plant - **shrub**	 basil - **herb**

Pg 66 Ex 5.6

1. Picture 1: The celery plant will remain the same.
   Picture 2: The leaves of the celery plant will turn blue.
2. The stem of plant carries water to different parts of the plant.

Pg 68 Ex 5.7

photosynthesis / water / carbon dioxide /substance / sunlight / food

Pg 68 Ex 5.8

1. Through their pores.
2. Paper is obtained from wood pulp.
3. To add flavour to food.
4. Because at night there is no sunlight.
5. The food is stored in different parts of the plant.
6. A herbarium is a collection of dried leaves.

Pg 69 Ex 5.9

Roots – Absorb water and minerals from the soil.
Stem – Carries water from the roots to the other parts of the plant.
Leaves – Manufacture food for the plant.
Flower – Produces fruits and seeds.
Fruit – Protects and nourishes the seeds.
Seeds – Germinate into new plants.

Pg 72 Ex 6.0

1. C 2. B 3. D 4. D 5. B

Pg 73 Ex 6.1

 To practise kite surfing - **wind**	 To dry clothes - **sun**
 To play football - **food**	 To cook food – **natural gas**
 A moving car - **petrol**	 Producing electricity – **falling water**
 To grill meat - **charcoal**	 A burning candle - **wax**

Pg 74 Ex 6.2

1. Energy is the ability/capacity to do work.
2. From the food they eat.
3. To produce its food.
4. To dry clothes. / To dry fish/octopus. /
   To heat water in a solar water heater. /
   To produce electricity using solar panels.
5. Deep underground.
6. They were formed millions of years ago from the remains of dead plants and animals.
7. Coal / Petrol / Natural gas
8. To drive motor vehicles using petrol. /

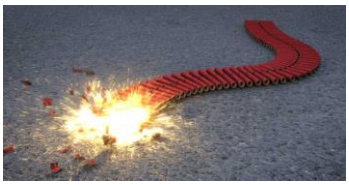
To produce electricity using coal.

9. Sun / Wind / Falling water / Coal / Bagasse
10. (a) A – Solar water heater B – Gas water heater
    (b) To heat water.

Pg 79 Ex 6.3

1. chemical 2. movement 3. charcoal
4. electricity 5. light 6. coal

Pg 80 Ex 6.4

 fire crackers **- loud**	 playing violin **- soft**
 aeroplane taking off **- loud**	 birds chirping **- soft**

Pg 80 Ex 6.5

1. Light energy / Heat energy
2. Chemical energy
3. It allows us to hear and communicate. /
   It allows us to avoid dangers.
4. We may become deaf.
5. Car battery / solar panel / electrical cells.
6. (a) To cook rice in a rice cooker. /
   To heat food in the microwave. /
   To wash clothes in the washing machine.
   (b) To use the computer. / To use the projector. /
   To switch on the fan when it is hot. /
   To switch on the lights.
7. Firefly.
8. (a) Cells (b) Chemical energy (c) Light energy
9. (a) No
   (b) It is the light of the sun that falls on the moon.
10. (a) A
    (b) Because the temperature in direct sunlight in higher than the temperature in the shade of a tree.

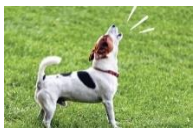
Pg 82 Ex 6.6

FEATURES	SOURCES OF ENERGY	FORMS OF ENERGY
 moving motorcycle	**petrol**	**movement**
 flying bird	**food**	**movement**
 lit oil lamp	**oil**	**light**
 battery operated radio when on	**battery**	**sound**
 burning charcoal	**charcoal**	**heat/light**

Pg 87 Ex 7.0

1. C 2. B 3. D 4. D 5. D

Pg 88 Ex 7.1

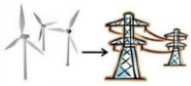
Activity/Object	Source of Energy	Form of Energy
 sailing boat	**wind**	**movement**
 dog barking	**food**	**sound**

 waterfall	**falling water**	**movement**
 radio using cells	**cells**	**sound**
 gas stove	**natural gas**	**heat**

Pg 89 Ex 7.2

ACTIVITY/OBJECT	FORM OF ENERGY USED	FORM(S) OF ENERGY PRODUCED
 burning of wood	**chemical**	**heat / light**
 television set	**electrical**	**light / sound / heat**
 wolf howling	**chemical**	**sound**
 moving metro express	**electrical**	**movement**
 oven	**electrical**	**heat / light**

Pg 90 Ex 7.3

ACTIVITY	ENERGY TRANSFORMATION
 A man cycling	**chemical** energy changes into **movement** energy
 Wind power station	**movement** energy changes into **electrical** energy
 A table lamp	**electrical** energy changes into **light** energy
 A battery operated drilling machine	**chemical** energy changes into **movement** energy
 Loudspeakers playing music	**electrical** energy changes into **sound** energy

Pg 91 Ex 7.4

1. To dry clothes. / To dry fish or octopus. / To heat water in a solar water heater.
2. (a) To get maximum sunlight. (b) Because in winter days are shorter and there is less sunlight.
3. Light energy.
4. Solar cells.
5. (a) Light energy → Electrical energy → Chemical energy
   (b) Chemical energy → Electrical energy → Light energy
6. To light electric bulbs. / To cook meat in an electric oven. / To boil water in an electric kettle.
7. To turn on the headlights. / To listen to music in cars using speakers.

Pg 93 Ex 7.5

SITUATIONS	SAVING ENERGY
 The women are talking while the door of the refrigerator is opened.	**Close the door of the refrigerator after using.**
 Lights turned on in an unoccupied bedroom.	**Switch off the lights when nobody is in the room.**
 Television is switched on while the lady is sleeping.	**Switch off the television when nobody is watching.**
 Listening to loud music.	**Listen to soft music instead of loud music.**

Pg 94 Ex 7.6

1. Because when we waste energy we are wasting money.
2.

 Energy efficient bulb	 Ordinary bulb

3. Energy efficient bulbs use less electrical energy and last longer than ordinary bulbs. /
   Energy efficient bulbs produce less heat and more light.
4. Because the refrigerator will use more energy to cool down the food.

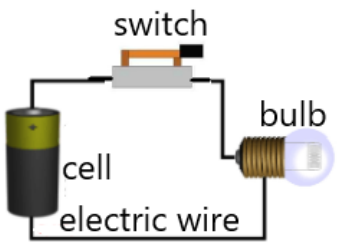
Pg 99 Ex 8.0

1. B 2. D 3. B 4. A 5. D

Ex 8.1

1. dry cells 2. bulb 3. plastic 4. copper
5. wet

Pg 100 Ex 8.2



Pg 100 Ex 8.3

1. It is the source of energy in the electric circuit.
2. In an open circuit, electricity does not flow and the bulb does not light up.
3. Connect the red electric wire to Part A of the bulb. /
   Connect the blue electric wire to Part A of the bulb.

Pg 101 Ex 8.4

1. Because the circuit is not closed/complete. /
   Because there is a gap which prevents electricity to flow along the circuit.
2. The bulb will light up.
3. A hairpin / A metal key / A safety pin.
4. A piece of dry wood. / An eraser.
5. Use two cells instead of one.

Pg 102 Ex 8.5

1. The plastic cover prevents us from getting electric shocks while touching the electric wire.
2. Rubber.
3. Copper / Aluminium.
4. Because they are good conductors of electricity.

Pg 102 Ex 8.6

1. **chemical** energy → **electrical** energy → **light** energy
2. **chemical** energy → **electrical** energy → **movement** energy
3. **chemical** energy → **electrical** energy → **sound** energy

Pg 102 Ex 8.7

1. There is water on the floor which can cause electric shock while touching an electric socket. /
   The broken wire is in contact with water which can result in electric shock.
2. He must wear a rubber gloves while working with electric wires. / He must make sure that his hands are dry.
3. The socket can explode.
4.

Conductor of electricity	Non-conductor of electricity
hairpin	**glass**
safety pin	**marble**
iron nail	**eraser**
sea water	**plastic ruler**