Answers Science G4

Pg 1 Ex 1.0

LIVING THINGS: bees, hibiscus plant, girl, leopard NON-LIVING THINGS: books, dustbin, lorry, washing machine

Ex 1.1

- (a) producing seeds (b) giving birth (c) laying eggs
- (d) giving birth (e) laying eggs (f) producing seeds

Ex 1.2

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

Page 5 Ex 1.3

- 1. They breathe / they grow / they feed / they reproduce
- 2. They both breathe / they both grow / they both reproduce
- 3. (i) Animals move from one place to another by themselves but only parts of a plant move. /
 - (ii) Animals reproduce by giving birth or laying eggs but plants reproduce by producing seeds.
- 4. (a) banana tree by cutting
 - (b) mango tree by producing seeds
- 5. To look for food/ to find shelter / to escape dangers
- 6. (a) to look for food
 - (b) to find shelter / to escape bad weather
 - (c) antelope to run away from danger
 - (d) lion to find food
- 7. (i) corals (ii) sponge
- 8. (a) The plant will bend over and grow towards sunlight.

(b)



- $\mathbf{9}$ (a) (i) They all grow (ii) they all feed / they all breathe
 - (b) The cow reproduces by giving birth but the bird reproduces by laying eggs.
 - (c) The cow moves by itself but the plant cannot move by itself.
 - (d) hen / duck

Ex 2.0

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

Ex 2.1

- 1. Air is a mixture of gases.
- 2. Odourless / colourless / tasteless
- 3. We would not be able to see.
- 4. (a) The nose (b) perfume / baked cake / air freshener
- (c) rotten food / dustbin / dirty clothes
- (d) We would not be able to distinguish between pleasant and unpleasant smell.
- To differentiate between sweet, salty, sour and bitter food.

Ex 2.2

1. bubbles of air

2.



3. Air is present in the soil.

Pg 11 Ex 2.3

- 1. (a) No (b) Yes
- 2. Bottle A is not tilted and there is no space for water to enter the bottle.
- 3. Bubbles of air. 4. air
- 5. Bottle A should be titled.
- 6. Air in water helps aquatic animals and plants to breathe.

Pg 13 Ex 2.4

- 1. move 2. containers 3. dissolved
- 4. aquarium 5. bubbles

Pg 14 Ex 2.5

- 1. From the atmosphere.
- 2. To stay alive.
- 3. They will suffocate and die.
- 4. Plants breathe in air from their pores (leaves).

Ex 2.6

(a) the soil (b) in water (c) the atmosphere (d) in water (e) the soil (d) the atmosphere

Pg 15 Ex 2.7

- 1. Yes. Because there are holes in the box which allow a good flow of air.
- 2. The rat would suffocate and die.
- 3. Animals need air to survive.

Pg 15 Ex 2.8

- 1. Candle 2
- 2. Air is important for burning to take place.

Pg 16 Ex 2.9

- 1. From the air dissolved in water.
- 2. The fish will lack air and suffocate because the jar is closed
- 3. Air is colourless.
- 4. We need pure and clean air.

Ex 2.10

- 1. (i) Air dissolved in water
 - (ii) Air from the atmosphere.
- 2. Its leaves.

Pg 17 Ex 3.0

A = flower, B fruit, C = leaf, D = seeds, E = stem, F = root

Pg 18 Ex 3.1

(a) pawpaw tree (b) balsamine plant (c) water lily (d) rose plant (e) banana tree (f) bean plant

i

Pg 19 Ex 3.2

- (a) rose (b) dahlia (c) anthurium
- (d) marigold (e) lily (f) daisy

Pg 21Ex 3.3

- (a) big (b) small (c) big (d) small
- (e) big (f) small

Pg 21 Ex 3.4

- 1. They attract insects for pollination. / They produce fruits and seeds.
- 2. To attract insects for pollination.
- 3. It is the transfer of pollen from one flower to another.
- 4. Bees / butterfly
- 5. The flower becomes a fruit.
- 6. Cauliflower / broccoli

Pg 22 Ex 3.5

- 1. It contains seeds.
- 2. It protects and nourishes the seeds.
- 3. The seeds germinate to become a new plant.
- 4. Lentils / beans / peas

Pg 28 Ex 3.6

1. B 2. C 3. D 4. C 5. D 6. D 7. A 8. B

Pg 29 Ex 3.7

Fruits — banana / litchi / avocado / guava Vegetables — lettuce / cabbage / ladyfinger / squash

Pg 29 Ex 3.8

cow – leaves monkeys – fruit birds – seeds soil insects – roots

Pg 29Ex 3.9

- 1. (i) Plants provide people with food
 - (ii) Plants provide people wood to make furniture.
 - (iii) Plants provide people with oxygen.
- 2. (i) Plants provide animals with food.
 - (ii) Plants provide animals with shelter. / Plants provide animals with oxygen.
- 3. Plants provide shade and beautify the environment.
- 4. (a) (i) wheat (ii) maize (iii) rice (iv) maize
 - (b) lentils / beans / red beans / soya beans
- 5. (i) olive (ii) almond (iii) peanut
- 6. (i) To fry fish (ii) To prepare salads.
- 7. (i) We may get cholesterol.
 - (ii) We may get heat diseases.
- 8. Fruit juice contains vitamins whereas fizzy drinks contain much sugar.

Pg 31 Ex 3.10

- (a) tea plant leaves tea
- (b) cacao plant seeds chocolate drink
- (c) coffee plant seeds coffee

Pg 31 Ex 3.11 (a)

- 1. By crushing/pressing fruits and vegetables.
- 2. Spices are used in food to add flavour.
- 3. Herbs are plants used to add taste to food.
- (b) (a) mint (b) cinnamon (c) lemon grass (d) garlic (e) corainder (f) ayapana (g) thyme

- (h) tumeric (d) cardamon
- (c) 1. (a) ayapana (b) mint (c) lemon grass
 - 2. Turmeric
 - 3. (a) coriander / mint (b) bay leaves
 - (c) thyme / rosemary

Pg 33 Ex 3.12

- (a) Cardamom, ginger and onion are spices
- (b) Maize, rice and wheat are cereals
- (c) Tea, juice and coffee are drinks
- (d) Parsley, mint and coriander are herbs
- (e) Lentils, beans and peas are pulses

Pg 33 Ex 3.13

Beetroot : root Cabbage : leaf Broccoli : flower

Tomato: fruit Carrot: root

Ex 3.14

- 1. An endemic plant is a plant that exists in only one place and nowhere else in the world.
- 2. Trochetia/ Ebony tree/ Bois de Natte
- 3. (a) Nature reserves are native forests that are protected by laws.
 - (b) (i) Macchabée forest
 - (ii) Black River Gorges National Park / Le Pétrin / Bras d'Eau National Park
 - (c) (i) We have no right to cut down endemic trees. /
 - (ii) We have no right to pick flowers, seeds and fruits from endemic trees.
- 4. (i) People cut down trees to build roads.
 - (ii) Animals cause damage to endemic trees. / Because of forest fires.
- 5. Exotic plants are plants that have been introduced in Mauritius by people who came from other countries.
- 6. To provide food / To beautify the environment.
- 7. Tecoma / Teak / Pine
- 8. (a) Goyave de chine / Privet
 - (b) Because they grow quickly in our forests and prevent endemic plants from growing well.

Pg 40 Ex 4.0

- $\textbf{(a)} \hspace{0.1in} \textbf{(a)} \hspace{0.1in} \textbf{walk} \hspace{0.1in} \textbf{(b)} \hspace{0.1in} \textbf{fly} \hspace{0.1in} \textbf{(c)} \hspace{0.1in} \textbf{crawl} \hspace{0.1in} \textbf{(d)} \hspace{0.1in} \textbf{hop} \hspace{0.1in} \textbf{(e)} \hspace{0.1in} \textbf{fly}$
 - (f) swim (g) walk (h) creep (i) hop
- (b) (i) To look for food.
 - (ii) To find shelter.
- (iii) To run away from dangers.

Pg 41 Ex 4.1

(a) fins; tail (b) legs (c) wings (d) legs

Pg 43 Ex 4.2

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

Pg 44 Ex 4.3

- (a) Pink Pigeon (b) Cardinal Jaune (c) Kestrel
- (d) Gecko (e) Boa (f) Echo Parakeet

Pg 45 Ex 4.4

- 1. An endemic animal is an animal that lives nowhere else except in a particular place.
- 2. Pink Pigeon / Kestrel / Echo Parakeet

- 3. Cardinal Jaune / Fauvette de Rodrigues
- 4. Because their natural habitats have been destroyed.
- 5. To build roads / To build houses / For agriculture.
- 6. Ile aux Aigrettes / Round Island
- 7. An animal that has disappeared forever.
- 8. (i) Dodo (ii) Solitaire
- 9. Mauritius Wildlife Foundation
- 10. Laws have been passed to protect endemic animals. / Native forests have been declared as nature reserves.

Pg 48 Ex 4.5

1. exotic 2. dog 3. aquarium 4. endemic 5. parks

Pg 48 Ex 4.6

- An animal that has been introduced to our island from other countries.
- 2. It provides us meat. / It provides us milk.
- 3. Dogs / Cats / Birds
- 4. (a) Exotic (b) At La Vanille Nature Park
 - (c) Casela Nature Park

Pg 49 Ex 4.7

- 1. (i) Deer / Monkey (ii) Cat
- 2. (i) We must give them food and water.
 - (ii) We must give them shelter.
 - (iii) We must bath them regularly.

Pg 49 Ex 4.8

- 1. The dog.
- 2. Cows provide us milk. / Cows provide us meat.
- 3. Bees produce honey. / Bees help for pollination.

Pg 53 Ex 5.0

- (a) for washing clothes (b) for drinking
- (c) for watering plants (d) for washing our face
- (e) for making juice (f) for washing the car

Pg 54 Ex 5.1

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

Pg 54 Ex 5.2

- 1. (i) Odourless (ii) Colourless (iii) Tasteless
- 2. (a) liquid state (b) gas state (c) solid state
- 3. Rivers / Lakes / Reservoirs
- 4. (a) borehole (b) well

Pg 55 Ex 5.3

- (a) The level of water has decreased.
- (b) The heat of the sun evaporates the water.

Pg 56 Ex 5.4

- (a) Ice cubes
- (b) Water vapour
- (c) They are both invisible gases.
- (d) To chill drinks / To relieve pain / To freeze food
- (e) The ice cubes will melt to become water.

Pg 56 Ex 5.5

- (a) Liquid state
- (b) The water will evaporate and the clothes will dry up.

Pg 57 Ex 5.6

- (a) dissolves, colourless (b) does not dissolve, colourless (c) dissolves, colourless (d) dissolves, coloured
- (e) dissolves, coloured (f) does not dissolve, colourless

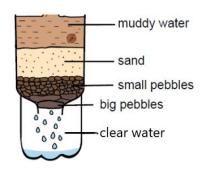
Pg 59 Ex 5.7

- 1. rain 2. underground 3. dam
- 4. solution 5. impurities

Pg 59 Ex 5.8

- 1. Mare aux Vacoas / Bagatelle Dam / Midlands Dam
- 2. Because it contains impurities.
- 3. The process of removing soil, dead animals, leaves and other impurities is known as filtration.
- 4. Because it contains germs.
- 5. By adding chlorine to the water. / By boiling the water.
- 6. (a) Human beings need water for drinking and bathing.
 - (b) Animals need water for drinking.
 - (c) Plants need water for growing.

Pg 60 Ex 5.9



Pg 61 Ex 5.10

- (a) Close the tap while brushing our teeth.
- (b) Do not water plants on rainy days.
- (c) Do not wash car on rainy days.

Pg 67 Ex 6.0

- (a) screws metal (b) pencils wood
- (c) calendar paper (d) vase glass
- (e) boots rubber (f) diary paper
- (g) dustbin plastic (h) hammer wood and metal
- (i) elastic bands rubber

Pg 67 Ex 6.1

1. A 2. C 3. C 4. A

Pg 68 Ex 6.2

- $(a) \ paper-diary/notebook/calendar\\$
- (b) wood chair/table/cupboard
- (c) rubber boots/tyres/gloves
- (d) plastic bench/bottles/cups
- (e) glass vase/ window pane/ aquarium

Pg 68 Ex 6.3

- (b) Wood: It is hard To make furniture.
- (c) Rubber: To make boots It is impermeable
- (d) Glass: To make window pane It is transparent

Pg 69 Ex 6.4

- 1. Rubber/Wood
- 2. (a) Wood is hard. (b) Because it is soft and flexible.
- 3. A material which allows light to pass through and we can see through it.

- 4. Glass
- 5. They are both impermeable.
- 6. Because it is a strong and hard material.

Pg 70 Ex 6.5

(a) Glass (b) Because it is transparent and impermeable.

Pg 70 Ex 6.6

- (a) Material ${\bf A}$ impermeable Material ${\bf B}$ permeable
- (b) Material **A** plastic Material **B** cotton
- (c) Material A.

Pg 71 Ex 6.7

- (a) Wood / Metal
- (b) Glass is made from silica sand.
- (c) Glass allows light to pass through and enables us to see through it.

Pg 71 Ex 6.8

- (a) The wooden door.
- (b) Because the wooden door is opaque and no one will be able to see through it.

Pg 75 Ex 7.0

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

Pg 76 Ex 7.1

- (a) food (b) petrol (c) sun (d) wind (e) sun
- (f) cooking gas

Pg 77 Ex 7.2

1. sun 2. light 3. Plants 4. harmful 5. wind

Pg 77 Ex 7.3

- 1. Energy is the ability to perform activities.
- 2. From the food they eat.
- 3. To do their daily activities.
- 4. (i) To grow (ii) To move from one place to another.
- 5. Chemical energy
- 6. (i) heat energy (ii) light energy
- 7. (i) It is free of cost. (ii) It does not pollute the environment.
- 8. (i) To dry clothes. (ii) To heat water using a solar water heater. (iii) To produce electricity using solar panels.
- 9. (i) To fly a kite. / To move a sailing boat.
 - (ii) To produce electricity using wind turbines. / To dry clothes.
- 10. (i) Cooking gas (ii) Wood

Ex 7.4.

- (a) Sun / Wind
- (b) Diesel. Because burning of diesel emits harmful gases.

Pg 79 Ex 7.5

- (a) wind: movement To fly a kite.
- (b) cooking gas: heat To boil water on a gas stove.
- (c) burning wood : heat To cook food
- (d) sun: heat To dry clothes.

Light - To produce electricity using solar panels.

- (e) food: chemical To do our daily activities.
- (f) electric torch : light To light the house during power failure.

Pg 86 Ex 8.0

(a) Noise pollution (b) Land pollution

(c) Water pollution (d) air pollution

Pg 86 Ex 8.1

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

Pg 87 Ex 8.2

- 1. Land pollution
- 2. plastic bottles / plastic bags
- 3. (a) It attracts rats and insects which can cause diseases in humans and animals.
 - (b) Plants do not grow well and may die.
 - (c) The environment looks dirty and can be smelly.
- 4. (i) We must throw wastes in covered bins.
 - (ii) Make compost with biodegradable wastes.
- 5. Mare Chicose Sanitary Landfill.
- 6. Food wastes / Garden wastes / Paper
- 7. By burying them.

Pg 88 Ex 8.3

- 1. Vegetable peel / garden wastes / old newspapers
- 2. (a) plastic cups (b) vase (c) envelopes
- 3. By using them for growing plants.
- 4. Glass Gallery at Phoenix.

Pg 84 Ex 8.4

- 1. Oil spillage by the ship.
- 2. (a) They may get skin diseases. (b) Aquatic animals may die.
- (c) Aquatic plants will not grow well.
- 3. We may get food poisoning.
- 4. (i) Dumping wastes in rivers. / Waste water from factories /
 - (ii) Use of pesticides/fertilizers near rivers.
- 5. Throw wastes in covered bins. / Factories must treat the waste water before releasing in rivers. / Use less pesticides/fertilizers in plants.

Pg 90 Ex 8.5

- 1. A dust from stone crusher B burning of waste
 - C smoke coming out of factories
 - D smoke coming out of vehicles
- 2. (a) Air pollution causes respiratory diseases such as asthma and lung cancer in human beings and animals.
- (b) Air pollution block pores of plants and prevent them from growing well.
- 3. A spray water while crushing rocks.
 - B throw wastes in bins instead of burning them.
 - C factories must have air filters in their chimneys.
 - D vehicles must do regular servicing
- 4. By wearing a face mask.

Pg 91 Ex 8.6

- 1. Noise pollution
- 2. Listening to loud music / Fire crackers / Use of an angle grinder.
- 3. To protect his ears from the loud noise.
- 4. Because fire crackers cause noise pollution can cause loss of hearing in animals.

Ex 8.7

(a) good (b) bad (c) good (d) bad (e) good