Easy Science 8 Worksheets

Unit 1: Variations, Heredity and Cell Division
Worksheet 1

1. Fill in the blanks.

a. People look _____ from each other.

b. _____ _____ is the scientific name of humans.

c. Some people are _____ and some are _____.

d. In a group of people there can be different colour of _____.

e. Parents pass on their characteristics on to their _____, some are from _____ and some are from _____.

2. Match the following.

Variations	Continuous and discontinuous
Types of variations	Small differences between members of the same species
Normal distribution curve	For example, eye colour
Acquired variation	Bell-shaped graph
Discontinuous variation	For example, time spent in sunlight

3. Look at the following images and briefly write about the feature that shows adaptation.

Worksheet 2

1. **Mark as True or False.**

   a. Cells are produced continuously by living things. _____

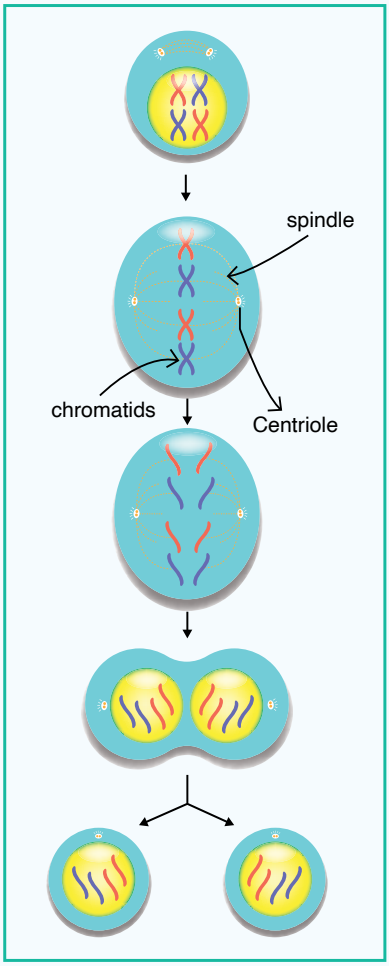
   b. There is only one type of cell division. _____

   c. Meiosis results in two similar cells. _____

   d. The cells produced through meiosis are different. _____

   e. There are five stages in mitosis. _____

2. **Identify the type of cell division and label the phases.**



_____

_____

_____

_____

_____

3. **Complete the following:**

Sometimes mistakes occur in the _____ of _____ when _____ separate. This results in changes in the _____ carried by _____ . This results in _____. Some mutations affect a single gene and are referred to as mutations. Other mutations may affect the structure of _____ or more _____. They are known as _____ _____.

Unit 2: Human Nervous System
Worksheet 1

1. Fill in the blanks.

a. The _____ _____ _____ is made up of the brain and the spinal cord.

b. _____ _____ make up the nervous system.

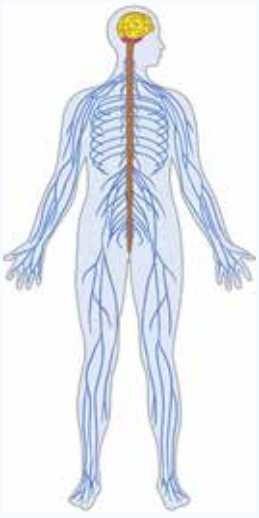
c. Electrical signals or _____ travel in one direction.

d. A bundle of nerve fibers is called as _____.

e. The brain has three main parts, namely _____, _____, _____.

2. Draw and label a diagram to show motor neurons.

3. Identify and label the following diagram.



Worksheet 2

1. **Complete the following:**

   a. PNS stands for _____ _____ _____.

   b. A _____ _____ can save body from harm.

   c. A _____ is released when impulse moves.

   d. CNS stands for _____ _____ _____.

   e. When a nerve connection the _____ of _____ to and from brain stops.

2. **Write down four ways by which we can keep our brains healthy.**

   - _____
   - _____
   - _____
   - _____

3. **Match the following:**

You are hungry and smell food	Reflex action
Body gets cold	Sweating
Body gets warm	Mouth waters
You shut your eyes due to a sudden flash of light	Shivering
When suddenly you smell something strong	Sneezing starts

Unit 3: Ecology
Worksheet 1

1. Fill in the blanks.

a. _____ is an environment that includes all living and non-living things.

b. All living things in an ecosystem are known as _____ _____.

c. Abiotic factors are _____ _____ in the ecosystem.

d. _____ _____ are created as a result of working together of living and non-living things.

e. _____ _____ plays a vital role in maintaining the ecosystem.

2. Define ecosystem.

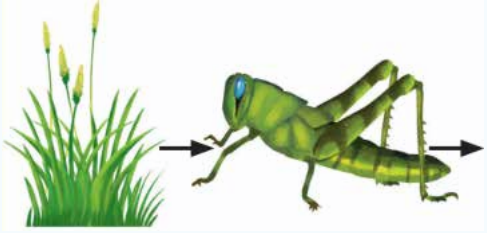
_____

3. Name the three processes involved in the carbon and oxygen cycles.

- _____
- _____
- _____

4. Look at the following images and label.

5. Draw the missing animal in the food chain.



Worksheet 2

1. **Look at the following images and write the type of ecological relationship.**

2. **Write down the three main types of symbiosis.**

- _____
- _____
- _____

3. **What are the three Rs important as preservation measures.**

- _____
- _____
- _____

Unit 4: Biotechnology
Worksheet 1

1. Fill in the blanks.

a. _____ is the use if living cells and organisms in products and processes that improve the _____of human lives.

b. The process of _____ is used to make _____ since olden days.

c. _____ are organisms that can carry out fermentation.

d. Making of _____, _____ involves _____, _____ and _____.

e. Only _____ can help in fermentation.

2. Complete:

A process called _____ involves heating of milk at _____ °C for _____ seconds, and then quickly down to _____ °C cooling.

3. Name the three processes involved in the carbon and oxygen cycles.

Pasteurization	Works best at 45°C
Fermentation	Kills germs in milk
Yeast	Similar to yoghurt making process
Rennet	Changes milk into yoghurt
Cheese making process	Contains enzymes chymosis

Worksheet 2

1. **State whether True or False.**

   a. Techniques in genetic engineering involves a lot of precision and skill. _____

   b. Animal and plant products used in industry are all natural. _____

   c. Genetically modified bacterial cells are grown in vats. _____

   d. A vaccine is a liquid containing weakened or dead organisms. _____

   e. Through genetic engineering human insulin is produced. _____

2. **Look at the following diagram of a genetically modified crop and label it.**

3. **Define:**

   Biotechnology.

   _____

   Genetic Engineering

   _____

   _____

   Vaccine.

   _____

   _____

   Diabetes

   _____

   Selective Breeding.

   _____

   _____

Unit 5: Periodic Table
Worksheet 1

1. Fill in the blanks.

a. There are _____ identified elements in the universe.

b. _____ _____ is a way of classifying elements in a form of a table.

c. _____ and _____ make up a Periodic table.

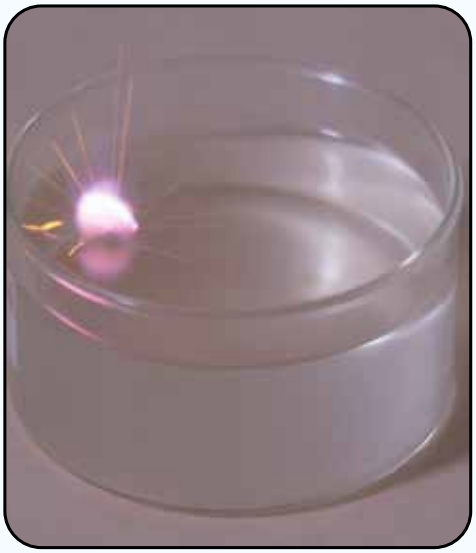
d. Groups are in _____ _____ and Periods are _____ _____.

e. Two electrons are found in outermost shells of _____ _____ _____.

2. Match the following.

Group I	The carbon family group
Group IV	The alkali metal group
Group VII	The oxygen and sulphur family group
Group 0	The halogens group

3. Look at the image and briefly write what happens to potassium when it is added in water?



Worksheet 2

1. **State whether True or False.**

   a. Iron is used to make pans as it is a poor conductor of heat. _____

   b. Gold has a shine. _____

   c. Copper is a good conductor of heat. _____

   d. Wood is a non-metal. _____

   e. Carbon exists only in one form known as graphite. _____

2. **Look at the images and write uses of the following.**

3. **a.** Define metalloids.

_____

b. Name any four metalloids.

- _____
- _____
- _____
- _____

Unit 6: Chemical Reactions
Worksheet 1

1. Fill in the blanks.

a. _____ are substances that participate in a chemical reaction.

b. The new substance formed as a result of chemical reaction is known as _____.

c. All chemical reactions involve _____ or _____ of chemical energy.

d. _____ elements are represented through _____ by scientists.

e. State of reactants and symbols are represented by _____ symbols.

2. Balance the following chemical equation.

$Cu + O_2 \longrightarrow$ _____

_____

$CO_2 + H_2O \longrightarrow C_6H_{12}O_6 + O_2$

_____

3. Look at the following images and mark whether endothermic or exothermic reactions are taking place.

Worksheet 2

1. Mark as True or False.

a. There is only one type of chemical reaction. _____

b. A synthesis reaction is also known as a combination reaction. _____

c. Energy is not required in a decomposition reaction. _____

d. In a displacement reaction a substance displaces another compound. _____

e. Chemical reaction of burning is combustion reaction. _____

2. Name the different types of chemical reactions.

- _____
- _____
- _____
- _____
- _____

3. Match the following.

Chemical bonds	Metals react with non-metals
Ionic compounds	Different atoms or molecules join together to form compounds
Cations	Negative ion
Anions	Positive ion
Ionic compounds	NaCl

Unit 7: Acids, Bases, and Salts
Worksheet 1

1. **Fill in the blanks:**

   i. Materials around us are generally _____, _____ or _____ .

   ii. A _____ _____ helps in identifying pH of a substance.

   iii. _____ are neutral substances.

   iv. Substances found right in the middle of the pH scale are _____ .

   v. _____ give sour or tangy taste to many fruits like oranges and lemons.

2. **Write four properties of acids:**

   - _____
   - _____
   - _____
   - _____

3. **Look at the following image and identify the substance and also write whether it is acidic or basic in nature.**

Worksheet 2

1. **Mark the following statements as True or False.**
   i. Acid rain helps ingrowth of plants. _____
   ii. Alkalis have also been used in glassmaking. _____
   iii. Alkalis have a pH less than 7. _____
   iv. The strength of an acid is measured by H+ concentration (pH). _____
   v. Litmus paper indicates whether a solution is acidic or basic. _____
2. **Write 4 properties of alkalis.**
   - _____
   - _____
   - _____
   - _____
3. Write down comparative properties of acids in the following table:

Alkalis	Acids
Slippery/ Soapy touch	
Bitter taste	
Usually no smell	
Turns red litmus blue	

unit 8: Reflection and Refraction of Light
Worksheet 1

1. i. _____ is a form of energy.

ii. _____ travels in a straight line in a straight form.

iii. Light travels at a speed of _____ km/s.

iv. We are able to see light due to _____ of light.

v. Light is able to travel through _____ or _____ material.

2. What is spectrum?

_____

_____

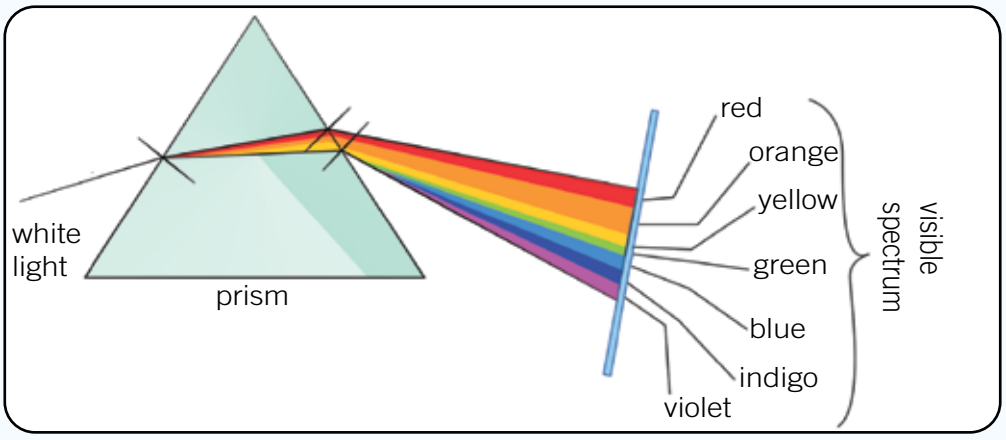
_____

3. Name the colours of visible spectrum.

_____

_____

4. Draw a diagram to show dispersal of white light through prism, into visible spectrum



Worksheet 2

1. mark the following statements as True or False.

i. Speed of light slows down as it enters a different medium. _____

ii. Reflection is bending of light when it enters a new medium. _____

iii. The bent ray of light is known as refracted rays. _____

iv. When light enters a dense medium it speeds up. _____

v. The apparent depth of a pool appears different if we look at a resting object at the bottom. _____

2. Match the following.

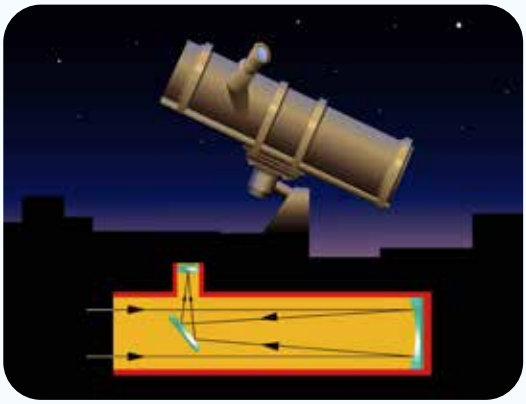
Lens	Thinner in the middle and thicker around the edge
Concave lens	A curved piece of transparent material
Convex lens	When it passes through lenses
Light bends	Thicker in the middle and thinner at the edges
Microscope	Optical instrument

3. i. Name the two types of telescopes.

a. _____

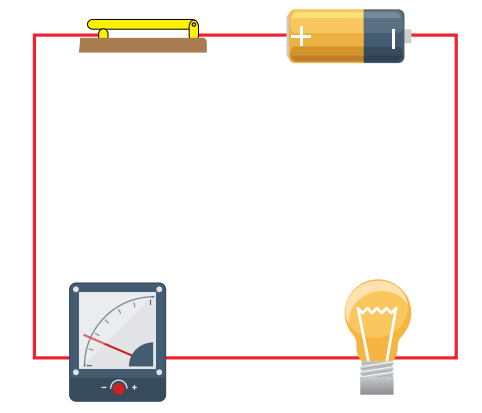
b. _____

ii. Identify the following images.



Unit 9: Electricity and Magnetism
Worksheet 1

1. Look at the image below and draw its circuit diagram.



2. Fill in the blanks.

i. _____ is the most common source of electricity in a circuit.

ii. Voltage is also known as _____ .

iii. The property of matter which _____ flow of electricity is known as resistance.

iv. _____ wire has more resistance than _____ wire.

v. Electric current easily passes through _____ wire.

Match the following.

SI units of electricity	Ampere
Flow of current	Volt is the SI unit
Voltage	Ammeter
Potential difference	Also called as voltage

Worksheet 2

1. Fill in the blanks'

i. A _____ with an iron core is known as electromagnet.

ii. Putting a rod in a solenoid makes it _____ .

iii. In electromagnets _____ _____ can be turned on and off.

iv. _____ are used in many devices like radios.

v. A _____ is enclosed in a fire alarm.

2. Complete the following.

a. Electricity can cause

_____.

b. Overloading plug sockets

_____.

c. Safety sockets on

_____.

3. Label the following images.

Unit 10: Force and Pressure
Worksheet 1

1. Fill in the blanks.

i. Several forces may act on one _____.

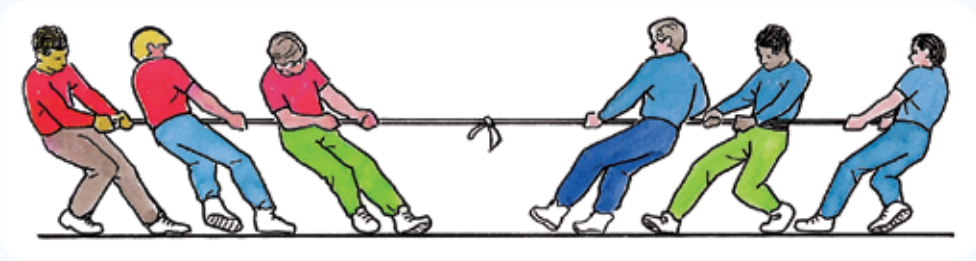
ii. _____ _____ cancel each other.

iii. If _____ are balanced , the object will not change its state.

iv. _____ stated three laws of motion.

v. _____ _____ are not equal.

2. Look at the image and answer the following questions.



i. Name the game being played on the image.

_____

ii. This game is a good example of what kind of what kind of forces?

_____

iii. What will happen when both the teams apply same force?

_____

iv. What will happen if team A applies a force of 350 N and Team B 275?

_____

4. Look at the image and briefly write about it.

Worksheet 2

1. Mark as True or False.

i. The density in liquids does not affect pressure. _____

ii. Weight of liquid pressing down on the base produce pressure. _____

iii. Deep oceans have greater pressures at the bottom. _____

iv. Pressure in liquids acts in one direction. _____

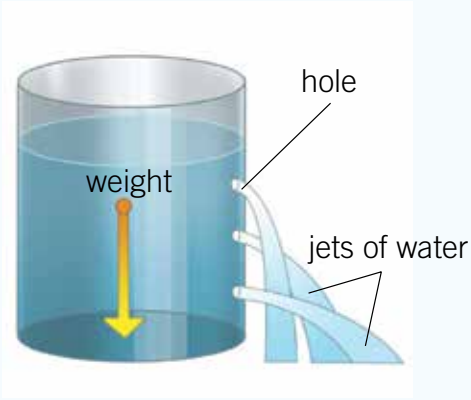
v. The pressure applied by a liquid does not depend on the shape of the container.

_____

2. Look at the image and identify the objects and its purpose(work).

_____

3. Look at the diagram and briefly write what does it show?



Unit 11: The Universe
Worksheet 1

1. Fill in the blanks.

i. The entire physical world is indicated by the word _____.

ii. _____ are the scientists that study the space and the universe.

iii._____ billions of galaxies.

iv. Each galaxy contains _____ of_____.

v. Planet Earth is a tiny part of the _____.

2. Match the following.

Galaxy	Holds the objects in place in space
Gravity	Huge collection of many celestial bodeis
Sagittarius A*	Number of galaxies in the universe
Andromeda	Hugge black hole
Two trillion	2.5 million light years

3. Identify the galaxies in the following images.



Worksheet 2

1. Match the following.

Nebula	A massive cloud of dust and gases
Protostar	Nebula turns into it due to further compression
Main sequence star	A baby star
Core	Centre of the star
White dwarf	Life cycle of the Sun

2. Draw and label life cycle of the Sun.

3. What is supernova ?

4. What is end of supernova?

Unit 12: Technology In Everyday Life
Worksheet 1

1. Look at the following diagram and label.

2. Name any two applications of acids and basis in daily life.

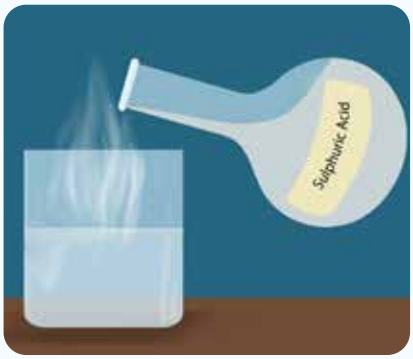
- _____
- _____

3. How can you clean a dirty coin?

_____

_____

4. Label the following diagram.



5. What substance is being prepared here?

_____

Worksheet 2

1. Look at the following image and label.

2. Identify the following and write its label.

3. Look at the following image and label it.

4. Name the four components of a UPS.