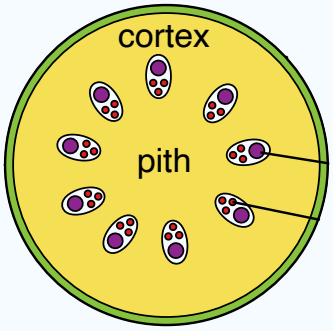
Easy Science 7 Worksheets

Unit 1: Plant Systems
Worksheet 1

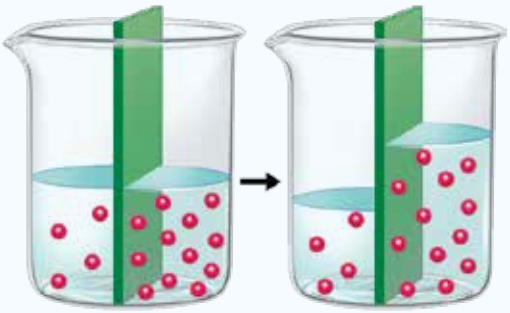
1. Match the following.

Photosynthesis	Occurs in the roots of plants
Flowers	Contain reproductive plant parts
Roots and stems	Leaf structure is especially designed for it
Osmosis	Main plant systems

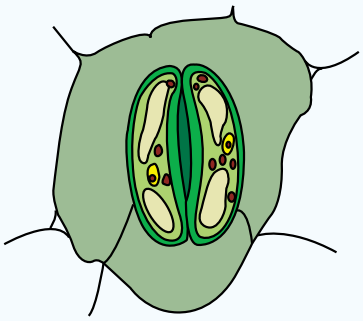
2. Label the following section of the stem.



3. Look at the diagram and briefly write about the process.



4. Following is a closed stoma. Draw and label the diagram of an open stoma.



Worksheet 2

1. Fill in the blanks.

a. Water vapour exits primarily through _____.

b. In _____, water molecules stick together to form a column.

c. Chlorophyll is found in the _____.

d. _____ provides energy in the food-making process, in plants.

e. _____, _____, and _____ are important minerals for plants.

2. Write the three factors that affect the speed of transpiration in plants.

_____

_____

_____

3. Write word equation for photosynthesis.

4. Draw and label a diagram of a leaf to show respiration.

Unit 2: Human Respiratory and Circulatory System
Worksheet 1

1. Name the six systems in the human body.

_____

_____

_____

_____

_____

_____

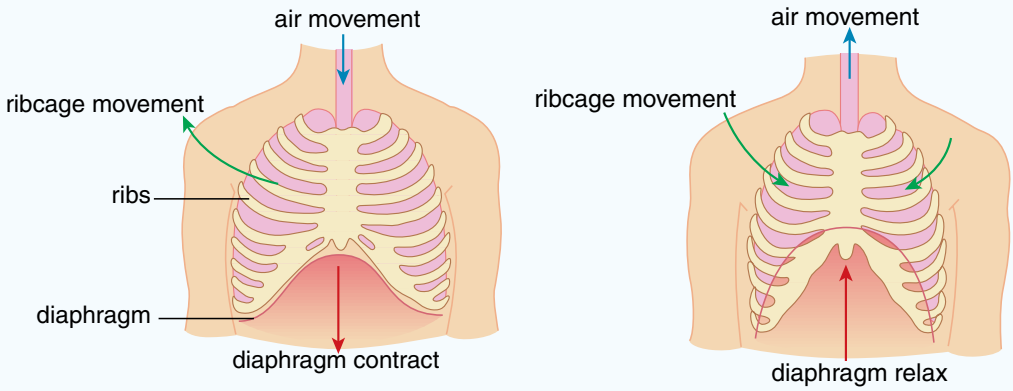
2. Define breathing.

_____

_____

_____

3. Identify phases in the following diagrams.



4. Match the following:

Breathing	Process of releasing energy through out the breakdown of glucose
Mitochondria	Exchange of gases between the lungs and the surrounding air
Respiration	Involved where energy is generated
Oxygen	Break down of glucose in a chemical reaction
Inhalation and Exhalation	Is taken in from the air is in breathing

Worksheet 2

1. Draw a diagram to show blood vessels.

2. Mark the following statements as True or False.

a. The human circulatory system is also known as the cardiovascular system. _____.

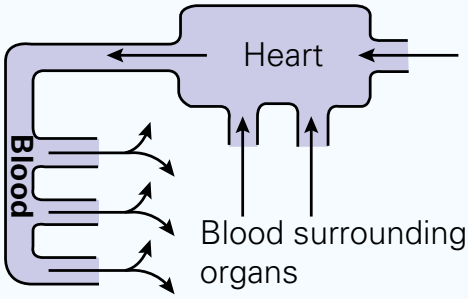
b. The human heart pumps blood through an open circulatory system. _____.

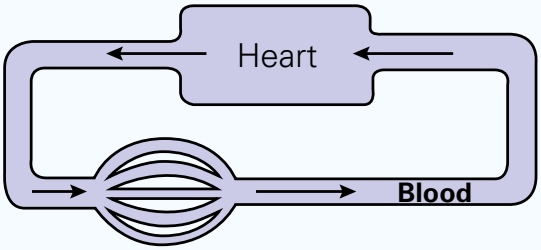
c. Blood vessels include arteries and capillaries only. _____

d. Veins carry deoxygenated blood to the heart. _____

e. The circulatory system supports higher metabolic rates. _____

3. Look at the diagrams and recognize the systems.

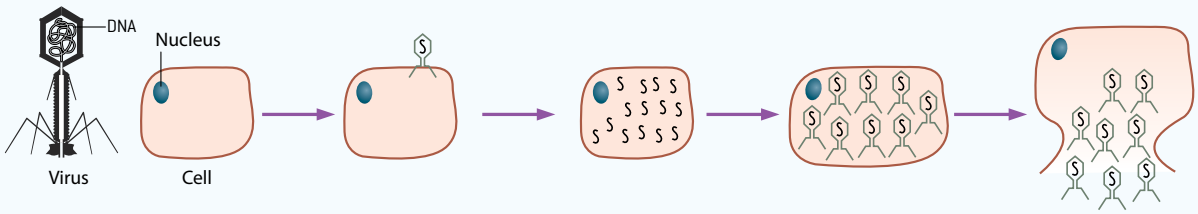




Unit 3: Immunity and Diseases
Worksheet 1

1. Draw bacteria to show their different shapes.

2. Label the following diagram to show how a virus gets into living cells and reproduces.



3. Define the following:

a. Parasites:

_____

b. Fungi:

_____

4. Write names of some infectious diseases.

_____

_____

_____

_____

_____

_____

Worksheet 2

1. Label the following pictures to show hygienic practices.





2. Why do we need to stay at home when sick? Explain.

_____

_____

3. Name the three types of the immune system in the human body.

_____

_____

_____

4. Define Vaccine:

Vaccine:

_____

_____

Unit 4: Structure of an Atom
Worksheet 1

1. Draw a diagram to show the structure of Lithium (atomic no.3) and write the distribution of electrons in its shells.

2. What is the mass number? Write the definition and equation.

_____

_____

3. Complete the following table for the first six elements:

Element	Symbol	Atomic number	Number of electrons	K	L	M
Hydrogen	H	1	1			
Helium	He	2	2			
Lithium	Li	3	3			
Beryllium	Be	4	4			
Boron	B	5	5			
Carbon	C	6	6			

Worksheet 2

1. Fill in the blanks.

a. _____ is a big chart.

b. Basic building blocks of matter are _____.

c. _____ is the element outside the periodic table, as it does not belong to a any particular group.

d. The _____ number is rhe same as the number of _____ in the outermost shell.

e. _____ are a group of soft, silvery metals.

2. Fill in the following table.

Number of groups	Name of group	Number of electrons in the outermost shell
I		
II		
III		
IV		
V		
VI		
VII		
VIII		

Unit 5: Physical and Chemical changes
Worksheet 1

1. Complete the table to indicate whether the change that occurred is physical or chemical.

Example	Physical change	Chemical change
Melting of ice		
Burnt candle		
Mixture of sugar and water		
Crushed aluminium cane		
Fried eggs		

2. Fill in the blanks.

a. Physical changes are _____.

b. Chemical changes are _____.

c. _____energy is always taken in or given out in a chemical change.

d. Through a _____ change no new substances are formed.

e. Ash is a result of burning of _____, which is a _____ change.

3. Look at the following images and recognize the type of change.

Worksheet 2

1. Complete the following.

a. Oxidation is a _____

b. Combustion happens _____

c. Fuel + Oxygen → _____ + _____

d. Rusting is a process where _____

e. Rust is the substance formed when iron is exposed to _____.

2. Write three effective ways to prevent rusting.

- _____
- _____
- _____

3. Look at the following image and recognize the phenomenon and write.

4. Draw a diagram to show 'Green House' effect.

Unit 6: Chemical Bonds
Worksheet 1

1. Fill in the blanks.

a. Molecules form when _____ of atoms elements bond together.

b. Elements in chemical bonds are joined together by _____.

c. A molecule of Nitrogen contains _____ atoms.

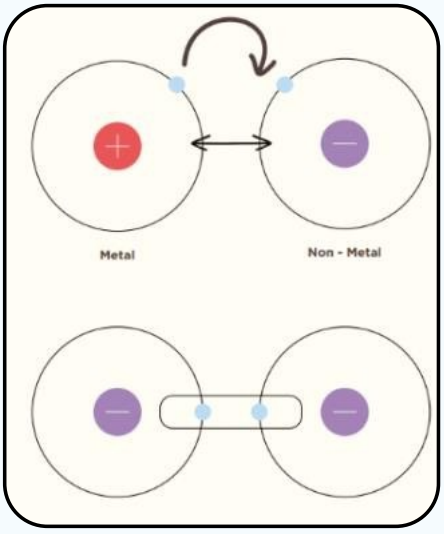
d. In ionic bonding atoms gain or lose _____.

e. _____ is based on the number of electrons in the outermost shell.

2. Complete the following table:

Group numbers in periodic table	Number of electrons in the outermost shell	Valency
1		
2		
3		
4		
5		
6		
7		
8		

3. Label the following diagrams.



Worksheet 2

1. Define covalent bond.

_____

_____

2. What are the three types of covalent bonds? Write with an example.

- _____
- _____
- _____

3. Draw the diagrams/cross and dot structures to show the bonding between the molecules of:

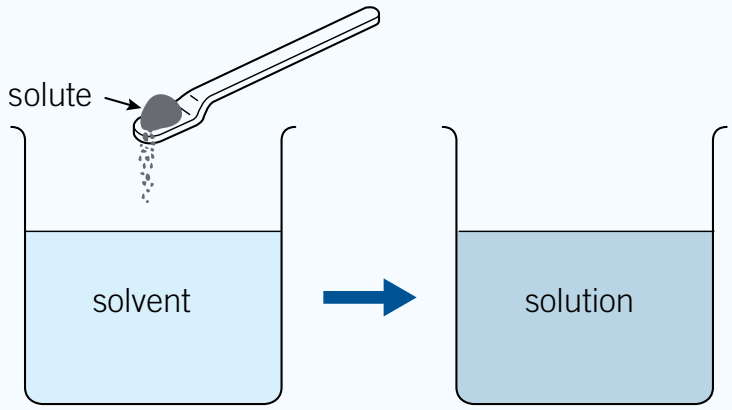
a. Hydrogen

b. Chlorine

c. Oxygen

Unit 7: Solutions
Worksheet 1

1. Briefly write about the following diagram.



2. Fill in the blanks.

a. _____ is produced when a _____ is dissolved in a _____.

b. _____ is when a substance does not dissolve in another substance.

c. A solution forms when a solute is dissolved in a _____.

d. A substance that dissolves in a solvent is known as a _____.

e. A substance that does not dissolve in a solvent is known as _____.

3. Draw diagrams to show:

- Concentrated solution
- Dilute solution

Worksheet 2

1. Define:

- Solubility.

_____

_____

2. Name the factors that affect solubility.

- _____
- _____
- _____
- _____

3. Mark the following as True or False.

a. Solubility is the property of a solution that shows how well a solute, dissolves in a solvent. _____

b. With a temperature rise, solubility of a salt solution decreases. _____

c. With an increase in pressure in solids, the solubility increases. _____

d. At higher temperatures, more gas molecules dissolve. _____

e. CO_2 is added to fizzy drinks under pressure to make them fizz when opened. _____

Unit 8: Force and Motion
Worksheet 1

1. Define:

- Force:

_____

_____

- Contact Forces:

_____

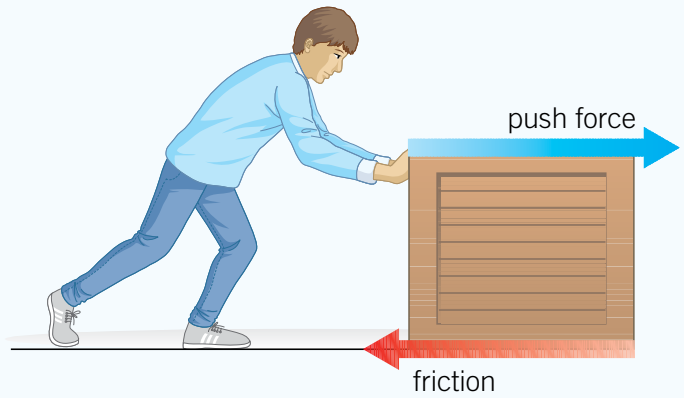
_____

- Non-contact Forces:

_____

_____

2. Look at the following image and briefly explain it.



_____

_____

3. Name the contact forces.

- _____
- _____
- _____
- _____
- _____

Worksheet 2

1. Fill in the blanks:

a. The _____ forces are between two objects that are physically separated from each other.

b. Magnetic force appears between two _____.

c. The force experienced between electrically charged particles known as _____.

d. Gravitational force is a _____ noticed present between large masses.

e. Earth has a _____ force.

2. Match the following:

Forces	**Forces meter**
Action and Reaction forces	Pushes and pulls blw objects
Force Measurement	Work in opposite directions
Unit of force measurement	Newtous (N)

3. Complete the following by filling in the missing words.

a. Speed = _____ + time

b. SI unit for speed is _____ per second

c. Average speed = total distance + total _____.

d. A _____ graph tells us how for something travels over a period of time and whether or not it's speed is changing.

Unit 9: Waves and Energy
Worksheet 1

1. Fill in the blanks.

a. A disturbance in the medium that carries energy without the movement of particles is known as _____ .

b. The energy across water is moved by _____ waves.

c. _____ waves travel through space.

d. The waves that require a medium to travel through air are called as _____ _____ .

e. Sound cannot travel through a _____ .

2. Label the following images to show the type of wave.

3. Complete the following.

_____ spectrum includes _____ , _____ ,
_____ , _____ .

The visible light has wavelength of _____ and _____ nanometer, with different colours based on _____ .

Worksheet 2

1. State whether the following is True or False.

a. Sounds' highness or lowness is known as pitch. _____

b. When the top string of a guitar is plucked, it vibrates 250 times per second._____

c. Amplitude determines the loudness of a sound. _____

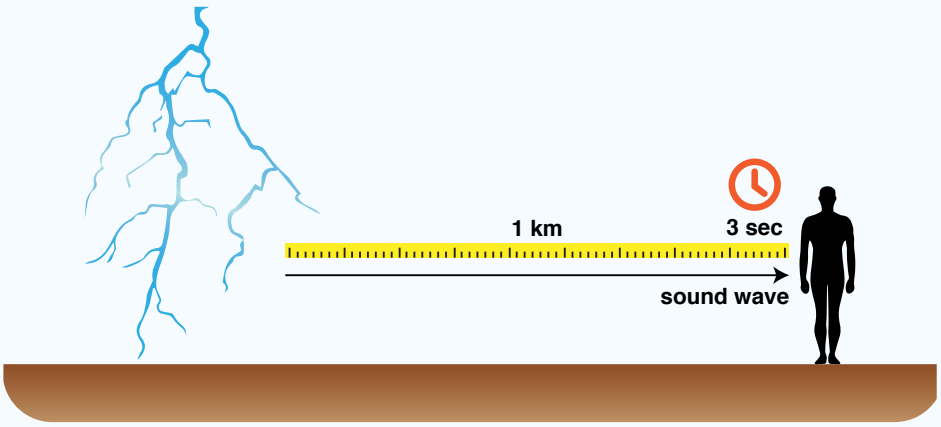
d. Sound travels at uniform speed in different media. _____

e. Speed of light and sound of thunder travel at the same speed.

2. Name the two factors that affect loudness.

- _____
- _____

3. Look at the following diagram and explain.



4. What is the reflection of sound? Briefly explain.

_____

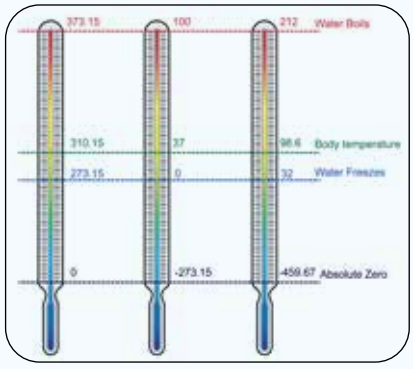
_____

Unit 10: Heat and Temperature
Worksheet 1

1. Match the following in the table.

Meat gain	We pull our hand away
Touch something hot	Gets warmer metal container
Joules	Absolute zero
Kelvin scale	Unit for heat measurement
In oC (freezing point of water)	To oC

2. Look at the following diagrams of thermometers and name the types of scales.



Q3. Define

a. Absolute zero,

_____

_____

b. Temperature,

_____

_____

c. Heat,

_____

_____

5. Draw diagrams to solid, liquid and gas particles based on kinetic theory.

Worksheet 2

1. Name the three methods of heat transfer.

2. Look at the following images and identify the material as conductor or insulator.

3. Name some appliances that work on the principle of radiation.

4. Why do the railway lines have expansion joints? Explain.

Unit 11: Earth and Space
Worksheet 1

1. Fill in the blanks.

a. The _____ of the astronauts will remain the same on the Moon, and Mars.

b. The force of _____ is not the same on every object.

c. Different planets have different _____ pulls, due to their different sizes.

d. All the planets in our solar system orbit the _____ due to its huge mass, which results in higher gravity.

e. _____ depends on _____ .

2. Label the following image.

3. Complete.

Formula of weight:

Weight = _____ x _____

W= _____ x _____

4. Match the following.

Tides	Happens during full Moon
Tidal force	Rise and fall of sea level
Daytime on Earth	Caused by Earth's rotation and gravitational pull of the Moon
Spring tide	When part of the Earth faces the Sun
Earth's rotation	When Earth spins like a top

5. Draw and label a diagram to show gravitational pull of the Moon.

Worksheet 2

1. State whether True or False.

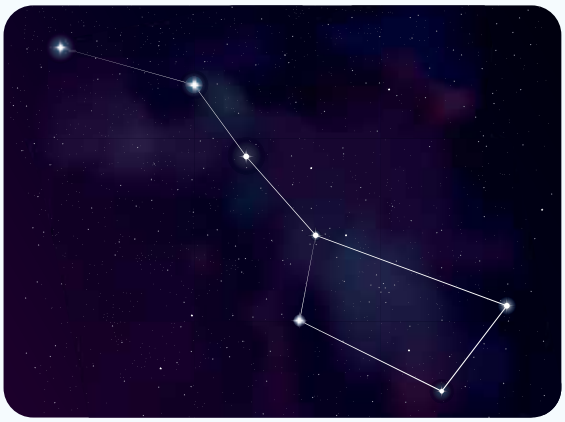
a. When part of the Earth faces away from the Sun, it is nighttime. _____

b. As Earth revolves around the Sun, all parts of the Earth have light. _____

c. Pakistan experiences winter, when the Northern Hemisphere is tilted away from the Sun. _____.

d. When countries in the Northern Hemisphere like Pakistan have summer, in Australia and New Zealand, it is winter. _____

2. Identify and name the following constellations.



3. Complete the following.

a. A group of stars that forms a certain pattern in the sky _____.

b. The position of stars on the sky keeps on changing due to _____.

c. Constellations are often named after _____.

d. _____ and _____ are some of the brightest constellations.

e. The big dipper consists of _____ stars.

Unit 12: Technology in Everyday Life
Worksheet 1

1. Draw a diagram to show a simple irrigation system.

2. Look at the following image, identify and write how the system is useful in irrigation.

_____

_____

_____

3. What is food preservation?

_____

_____

4. Name some older techniques for food preservation.

- _____
- _____
- _____

Worksheet 2

1. What is a stethoscope?

_____

2. Who uses a stethoscope?

_____

3. Label the following images;

4. Why do we need to apply hand sanitizers?

_____

_____

5. Name the material used for making a stethoscope.

- _____
- _____
- _____
- _____
- _____
- _____