

NADI SANGAM SCHOOL

HOME STUDY PACKAGE 14

YEAR 7



2021

2. In which category in the library would you find a book named “**Mr. Twiddle** by *Enid Blyton*”?
(1 mark)

Mass Media

1. State an advantage of television over radio? (1 mark)

PART II

USAGE

(5 marks)

Write your answers in the Answer Book.

1. In each space, write one word which makes sense in the story given below.

Read the whole story before beginning to write.

The family turned the cave into their rainy season home and called it Rock Castle. They were very happy to discover that it was full _____1_____ salt.
After this, they _____2_____ to move some of their animals and make a farm house _____3_____ well. They did this in a new part of _____4_____ Island, close to a plain which had lots of cotton bushes _____5_____ it.

Adapted from Swiss Family Robinson

1076 NADI SANGAM SCHOOL
WEEKLY HOME STUDY PACKAGE 14

Subject: Mathematics






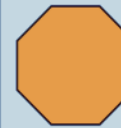
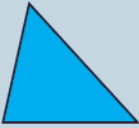




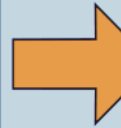
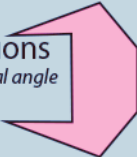






Year/Level : 7

Strand	M 4: GEOMETRY
Sub Strand	M 4.2: Shapes
C L O	<ul style="list-style-type: none"> ➤ Name and classify all shapes and solids using their properties. ➤ Identify and name the edges, corners and faces of 3D shapes. ➤ Construct platonic solids using different shapes.



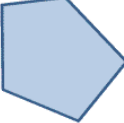
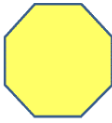
SHAPES POLYGONS Achievement Indicator:

❖ Understand properties- line segments, rays, parallel lines, curves, polygons of 10 or more sides and circles.

Polygons are 2-dimensional shapes. They are made of straight lines and the shape is "closed" (all the lines connect)

<p>A polygon can have three or more sides.</p>	3 sides Triangle	4 sides Quadrilateral	5 sides Pentagon	6 sides Hexagon	7 sides Heptagon	8 sides Octagon
<p>Regular Polygons all sides are equal length and all internal angles are equal</p>						
<p>Examples of Irregular Polygons any polygon that is not regular</p>						
<p>Concave Polygons have at least one internal angle greater than 180°</p>		<p>Convex Polygons have no internal angles greater than 180°. All regular polygons are convex.</p>		<p>Complex Polygons have a line that crosses another line (normal polygon rules may not apply)</p>		
<p>Examples of shapes that are Not Polygons</p>	Circles 	Any shape that includes a curve 	Any shape that isn't 'closed' 	Three-dimensional objects 		

Exercise:

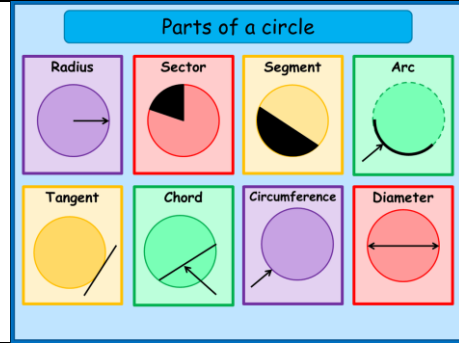
<p>1. Indicate whether it is a polygon or not a polygon. Give a reason for your answer.</p>	<p>2. State if the polygon is regular or irregular. Give a reason for your answer.</p>
<p>a) </p> <p>b) </p>	<p>a) </p> <p>b) </p>

3. Name shapes with 9, 10, 11 and 12 sides.

CIRCLES

Achievement Indicator:

- ❖ Understand properties- line segments, rays, parallel lines, curves, polygons of 10 or more sides and circles



CLASSIFYING SHAPES

Achievement Indicator:

- ❖ Name and classify all shapes and solids using their properties.

Flat shapes like lines, circles and triangles that can be drawn on a flat surface like a piece of paper is called *plane geometry*. They are *two dimensional (2D)* figures having only lengths and widths.

Objects having fixed shape and size and occupying fixed space are called *solids*. They are three-dimensional (3D) figures having lengths, widths and heights. Examples are cubes, cuboids, prisms, cylinder and pyramids. Solids have *properties* (special things about them) such as: volume (think of how much water it could hold) surface area (think of the area you would have to paint) how many vertices (corner points), faces and edges they have

3 DIMENSIONAL SHAPES

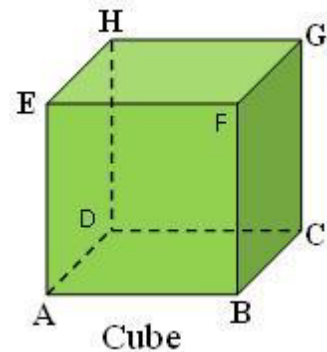
- ❖ Identify and name the edges, corners and faces of 3D shapes.

A three dimensional (3D) solid has a:

- face - flat surface of the solid.
- vertex – corner.
- edge – line segment joining two vertices.

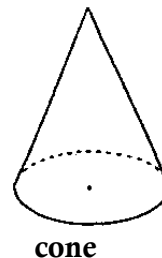
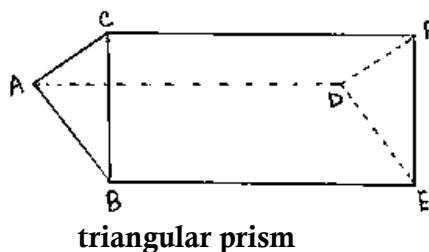
Example:

- faces: ABCD, EFGH, ADHE, BCGF, ABFE and DCGH = 6 faces
- vertex: A, B, C, D, E, F, G, H = 8 vertices
- edges: AB, BC, CD, DA, EF, FG, GH, HE, AE, DH, BF, CG = 12 edges



EXERCISE:

1. Colour the faces yellow, edges blue and vertices red then work out its number of faces, vertices and edges of the following solids.



PLATONIC SOLIDS

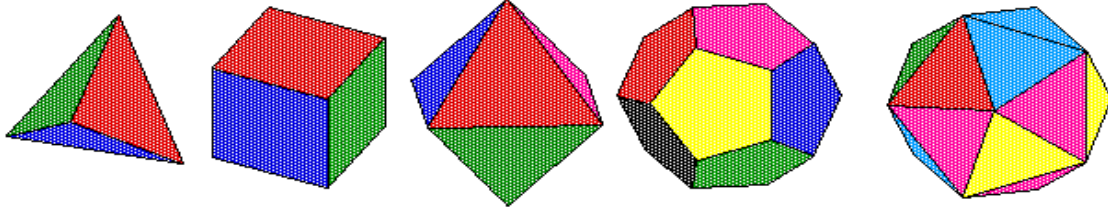
- ❖ *Construct platonic solids using different shapes.*

Platonic shapes are also 3D shapes. It has the following characteristic

- ❖ all the faces are congruent regular polygons.
- ❖ same number of regular polygons meeting at each vertex (corner).

There are only 5 platonic shapes.

The five Platonic solids



The Tetrahedron

The Cube

The Octahedron

The Dodecahedron

The Icosahedron

The five regular solids discovered by the Ancient Greek mathematicians are:

The Tetrahedron :	4 vertices	6 edges	4 faces	each with 3 sides
The Cube :	8 vertices	12 edges	6 faces	each with 4 sides
The Octahedron :	6 vertices	12 edges	8 faces	each with 3 sides
The Dodecahedron :	20 vertices	30 edges	12 faces	each with 5 sides
The Icosahedron :	12 vertices	30 edges	20 faces	each with 3 sides

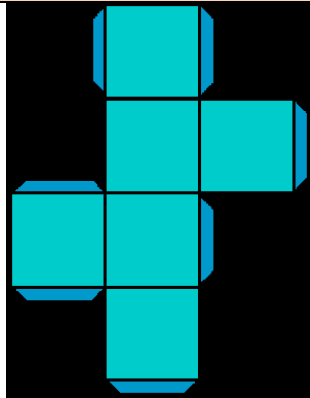
The solids are regular because the same number of sides meet at the same angles at each vertex and identical polygons meet at the same angles at each edge.

These five are the only possible regular polyhedra.

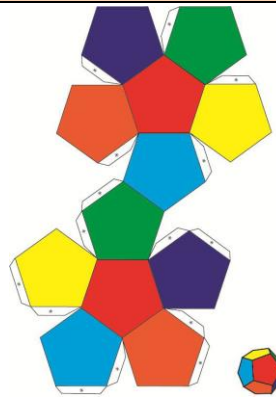
NETS OF PLATONIC SHAPES

Nets:

Try unfolding the solid cube you had made in your last lesson so that all of its faces are laid out as a set of squares joined at their edges. What you get is called its *net*. There are many different nets for a particular solid depending on how you unfold it.



cube



Dodecahedron

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YEAR 7
BASIC SCIENCE
WEEKLY HOME STUDY PACKAGE 11

STRAND	STRAND 3 ENERGY
SUB STRAND	Under water sounds Speed of sound The Auditory System and its care
CONTENT LEARNING OUTCOMES	<ul style="list-style-type: none">➤ Understand how sound travels in solid, liquids and air➤ Explain the auditory system and its care

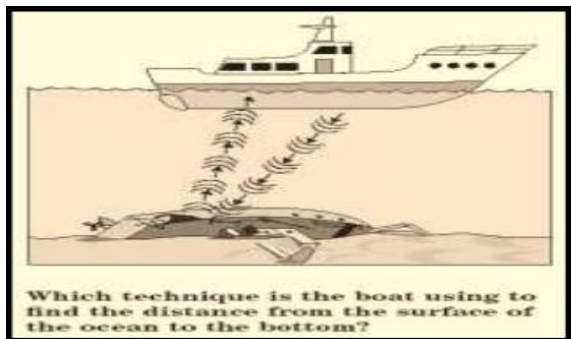
Extra Readings

How fast does sound travel?

Sound travel much faster through solids and liquids than through air. On land, an explosion at sea often sounds like two booms – sound waves travelling through the water and air arrive at different times. Sound travels better through solids and liquids than through air. That's why American Indians used to put their ears to the ground to listen for horses.

Underwater sounds

By sending out sound pulses, ships can detect whether something such as a submarine is below them in the water and how deep it is. The sound pulses are reflected back to the ship when they hit something. This is called sonar. Sound travels four times as fast in water as in air.



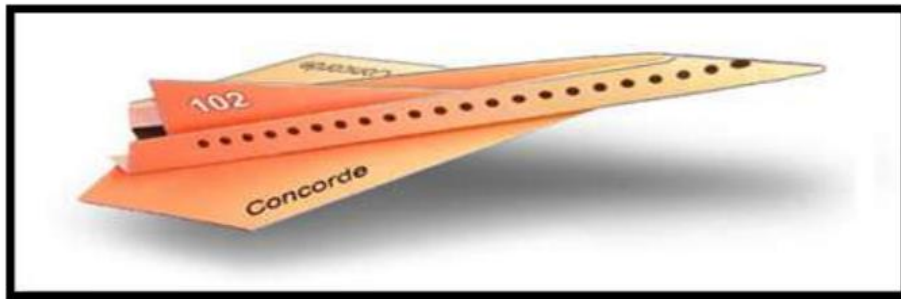
Thunder and Lightning

In a thunderstorm, the lightning flash and the thunderclap are produced together. Unless you are very close to the centre of the storm, you always hear the thunder after you see the lightning. This is because the sound of the thunder travels much more slowly than the light of the flash.



Faster than sound

Supersonic means faster than sound. Concorde is a supersonic aeroplane.



The Voice Box and The Ear

Introduction

Sound makes air vibrate. The vibrating air travels from place to place. When the vibrations reach your ears, you hear the sound. We also produce sound in a similar way. Our voice can make sounds of different pitches. This takes place in the **larynx** or **voice box**. The voice box contains **vocal cords** or pieces of muscles which vibrate when air passes over them. The tightness of the vocal cord can be controlled and that is how we produce high and low pitched sound.

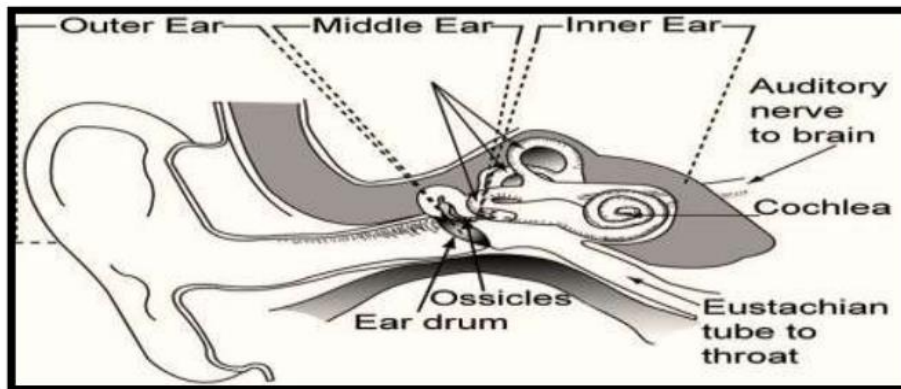
Activity 2: The Auditory System

Our ear is one of the most delicate and important sense organs in our body. The human ear or the auditory system is divided into three parts, outer ear, middle ear, inner ear.

The **outer ear** – is like a cone or funnel. That is part of the ear that can be seen. It collects the sound and directs it to a tube called the **ear canal** and then to the **ear drum**. The vibrating air makes the ear drum vibrate.

The **middle ear** – is made up of ear drum and three tiny ear bones called ossicles. Ossicles send the eardrum vibration to the inner ear.

The **inner ear** – part of the inner ear is coiled up like a seashell. This is called the cochlea. It contains tiny hairs which pick up the vibrations from the liquid and pass them to the **auditory nerves**. This becomes an electrical signal. The auditory nerves carry the electrical signals to your brain, and you hear the **sound**.



Exercise: The Auditory System

1. Copy and complete.

The outer ear collects the sound and directs it to the _____ which passes it on to the _____. The ear drum vibrates which makes the _____ vibrates.

2. Answer the questions in complete sentences.

- What do the ossicles do?
- What do you think might happen to your sense of hearing if you damage any of these organs in your ear?

3. Conclusion:

- Why should we take care of our ear?
- Make a list of how we can take care of our ear. (3-4 ways)

The Greenhouse effect

A non-renewable energy source, such as coal, contributes to Global Warming by releasing a greenhouse gas into the atmosphere, which traps the Sun's heat, like a Greenhouse. The Sun's heat can get in, but it has a harder time getting out when there are too many Greenhouse gases in the atmosphere.

Energy Saving Hints

- Energy can be saved if it's only being used wisely.
- Wood energy can be plentiful if we keep on planting trees.
- To save energy at home we should turn off electricity when appliances are not in use
- Environment can be pollution free if usage of fossil fuels is minimized and other forms of energy which are pollution free are harnessed, like solar energy, wind energy and water power.
- Being energy wise now will take us to a good and healthy future.

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YEAR 7

WEEKLY HOMESTUDY PACKAGE 14

WHERE IN THE WORLD ARE WE LOCATED?

- Our island of Fiji is seated on the world's biggest ocean known as the South Pacific Ocean. The Pacific Ocean is the largest of the Earth's oceanic divisions.
- It extends from the Arctic Ocean in the north and is bounded by Asia and Australia in the west and the Americas in the east.
- You are on the Island of Fiji. Your country is surrounded by other Pacific island countries such as Vanuatu and Solomon in the west, Wallis and Futuna in the north, Tonga in the east, and New Zealand in the south.

BEING AN ISLAND COUNTRY

Fiji is an island country that is unique. As Pacific Islanders we are different from other parts of the world. These are some features that make us special:

- Small size islands
- The islands are physically isolated and far from each other,
- Its people are strengthened by boundaries of dangerous waters that increases a sense of place or identity.
- Its people maintain island communities regardless of economic pressures that is faced,
- Friendly people that care for each other
- Almost everyone on the island knows each other.

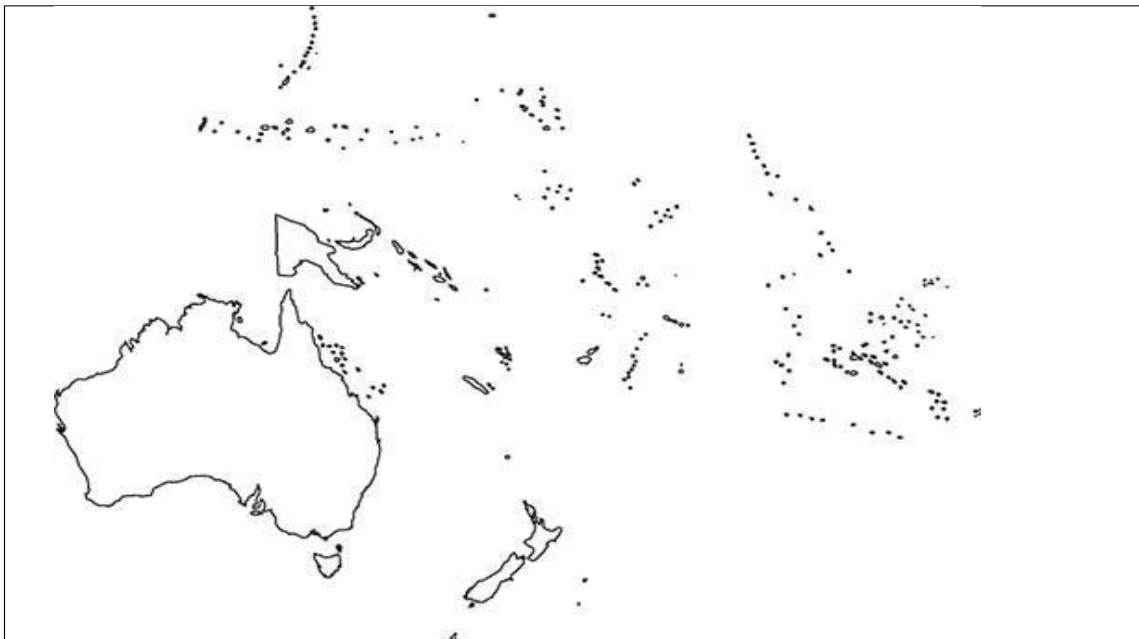


- As Islanders our life is shaped by our physical and social environment.
- The physical environment which is the land, ocean, plant and animal life enable us to collect the resources we can use for food and for our wants in our community.
- Our culture helps us to use our resources sustainably and also live life in a unique way practicing rituals in a significant way to observe important events.
- Fiji's location in the world is an advantage as it allows us to interact with the outside world.
- Many island nations in the region have smaller islands within that affect how their people live.
- Because of the smallness in size many people within these islands travel by punts or boats, others walk from their homes or village to other parts of the islands for services or emergency purposes that might not be found in their homes

Mapping Activity

Look at the map of the South Pacific provided. Locate and name the following countries on the outline map of the South Pacific provided:

- Australia
- New Zealand
- Papua New Guinea
- Vanuatu
- Fiji
- Solomon Islands
- Tonga
- Samoa

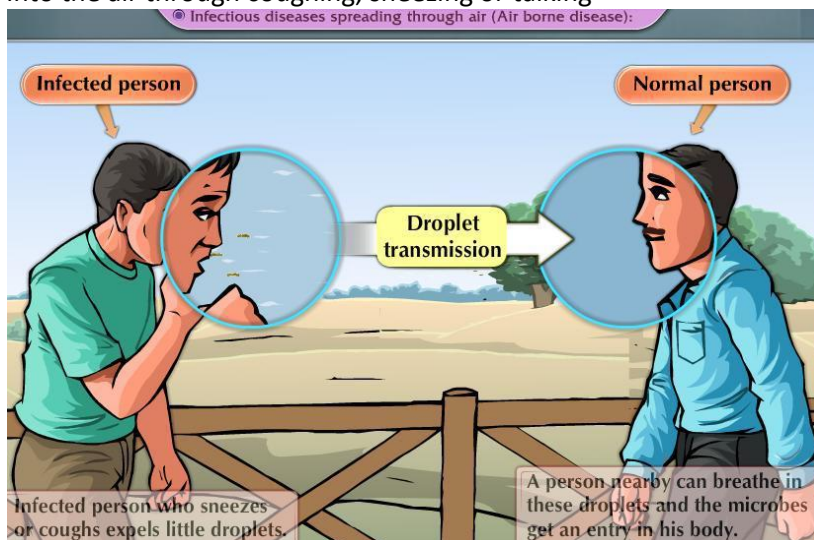


1076 NADI SANGAM SCHOOL
YEAR 7
HEALTHY LIVING
WEEKLY HOME STUDY PACKAGE 11

STRAND	UNIT 30 AIR BORNE DISEASES UNIT 31 NUTRIENTS IN FOOD
SUB STRAND	PERSONAL AND COMMUNITY HEALTH
CONTENT LEARNING OUTCOMES	<ul style="list-style-type: none"> ➤ State some air borne diseases and its prevention ➤ State the importance of nutrients in our body and how each one of it is beneficial to our body

Air Borne diseases

- Air borne diseases are basically spread through air where infected germs droplets are released into the air through coughing, sneezing or talking



Types of Air Borne Diseases

- TB
- Flu or common cold
- Influenza
- Measles

Prevention of Air borne diseases

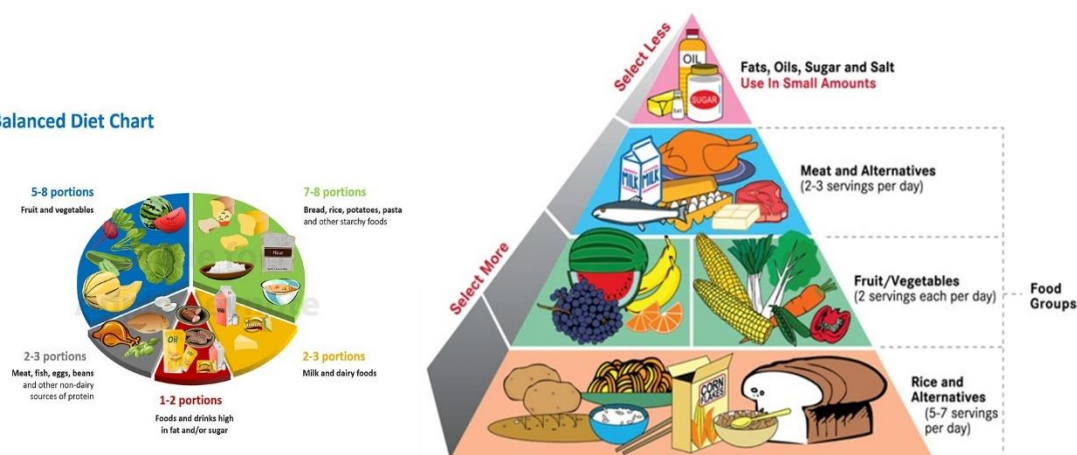
- Always cover your mouth and nose when coughing or sneezing
- Stay in bed when you are sick
- Keep windows open to allow air to move in and out freely
- Do not spit on the ground. If you have to spit, spit in the toilet or in a drain, or the hand basin where the sputum can be washed away
- A sick person should spit into a container which contains disinfectant

- Keep your body healthy by eating good food and exercising regularly.

Nutrients in food

1. **Carbohydrates** – are the main energy source for the brain without which body would not function properly. Sources of carbohydrate includes – fruits, breads and grains, starchy vegetables and sugar **example – root crops such as kumala , dalo rice, yams sugar etc**
2. **Protein** - is required for the building and repair of the body tissue, **example , fish , meat , milk , egg ,**
3. **Fat** – is an energy source that when consumed, increases the absorption of fat soluble vitamins including Vitamin A, D, E and K
4. **Vitamins** – Vitamin C is necessary for the structure of blood vessels, bones and ligaments. Rich source include citrus fruits strawberries, pepper and vegetables
5. **Minerals** – **sodium helps to maintain fluid volume outside of the cells and helps cells to function normally. Potassium maintains fluid inside and outside of the cells and prevents the excess rise of the blood pressure with increased sodium intake. Rich intake source includes banana, potatoes and tomatoes. Calcium helps to build strong bones and teeth – examples yoghurt, cheese and milk**
6. **Water** - **helps to maintain homeostasis in the body and transport nutrients to cells. It also assists in removing waste products from the body. Adult should consume 2 to 3 litres of water per day**

Balanced Diet Chart



1076 NADI SANGAM SCHOOL
YEAR 7 - हिन्दी HINDI
Worksheet 13 WEEKLY HOMESTUDY PACKAGE 10

तत्व	कविता
उप-तत्व	कला व शिल्प
विषय के अधिगम परिणाम	प्रथाओं और परंपराओं के माध्यम से प्राप्त किए गए सरल शिल्प डेङ्की/ मूसल आदि का प्रेमिान तैयार करना ।

इस कविता को ध्यान से पढ़ो ।

मेहनत
मेहनत करते जाओगे
जीवन सफल बनाओगे
सच का साथ निभाओगे
नाम अमर कर जाओगे
जब आशा को गले लगाओगे
हर कठिनाई को दूर भगाओगे
खुद मेहनत को अपनाओगे
तो औरों को उपदेश दे पाओगे

इन सवालों के जवाब पूरे वाक्यों में लिखिए ।

१. जीवन को कैसे सफल बनाया जा सकता है ?
२. कैसे लोग अपना नाम अमर कर पाते हैं ?
३. हमें क्यों आशा को अपनाना चाहिए ?
४. हम दूसरों को उपदेश कब दे सकते हैं ?
५. इस कविता से हमें क्या सीख मिलती है ?

समाप्त

