### VIDYA BHAWAN, BALIKA VIDYAPITH

**Shakti Utthan Ashram LAKHISARAI: 811311** 

Class: V Sub.tec: Naina paswan

Subject: SCIENCE Date: 07/12/21(Tuesday)

**BASED ON N.C.E.R.T PATTERN** 

**LESSON: 12. FORCE, WORK AND ENERGY** 

# V. Draw the following: 1. Draw a diagram to show that frictional force is good, and one showing that frict good. 2. An imaginary diagram on the topic "If there is no gravitational pull on the earth".

**ANSWERS: 1** 



#### **ANSWERS:2.**



## VI. Answer the following questions:

- 1. List out any four ways by which you can reduce friction.
- What are the different uses of solar energy.
- 3. What is the most important constituent of Biogas?
- 4. 'Biogas is an eco-friendly gas'. Explain.
- Define translucent and transparent objects with examples.
- 6. Write an experiment to show that light travels in a straight line.
- 7. What is the speed of light in the air?
- 8. Why do we need light?
- 9. Do plants need light? If yes, for what?
- 10. Name the factors that determine the size and side of the shadow.
- 11. What do you mean by a natural satellite?

#### **Answer**

#### Ans 1.

- By making the surface smooth i.e by appliying lubricant like oil or water.
- . By making that particular object streamlined so that air or water can flow around it easily.
- . By reducing the force acting on its surface.
- By reducing the contact between the surfaces.

## Ans 2: Solar energy is used today in a number of ways:

- As heat for making hot water, heating buildings and cooking.
- To generate electricity with solar cells or heat engines.
- To take the salt away from sea water.
- To use sun rays for drying clothes and towels.
- It is used by plants for the process of photosynthesis.

# Ans 3. The major constituent of biogas with there percentage is given below:

- Methane (CH₄) − 50−75%
- . Carbon dioxide (CO<sub>2</sub>) 25-50%
- . Nitrogen (N) 20–10%
- . Hydrogen  $(H_2) 0 1\%$
- . Hydrogen sulfide  $(H_2S) 0-3\%$
- Oxygen  $(O_2) 0 0.5\%$

Ans 4. Biogas is an eco-friendly fuel because it helps to reduce the greenhouse gas emissions and our dependency on fossil fuels. It is produced from decomposition of organic matter, thus is an effective way of disposal of organic waste.

TO	BE	CO	NTINU	E
----	----	----	-------	---