

Mount Litera Zee School Roorkee
Grade –VIII
Subject-Science worksheet

Date-22.02.21

**Chapter- Natural phenomenon,
Stars and solar system
pollution**

A. Tick (✓) the correct option:

1. Which of the following cannot be charged easily by friction?

- (a) A plastic scale
- (b) A copper rod
- (c) An inflated balloon
- (d) A woollen cloth

2. When a glass rod is rubbed with a piece of silk cloth the rod:

- (a) and the cloth both acquire positive charge
- (b) becomes positively charged while the cloth has a negative charge
- (c) and the cloth both acquire negative charge
- (d) becomes negatively charged while the cloth has a positive charge

3. The two objects rubbed against each other:

- (a) will lose electrons
- (b) will gain electrons
- (c) one will lose and other will gain electrons
- (d) none of these

4. Which of the following can be charged with static electricity?

- (a) Metal
- (b) Alloy
- (c) Insulator
- (d) Semiconductor

5. Which of the following occurs during lightning?

- (a) Nitrogen fixation
- (b) Acid rain
- (c) Greenhouse effect
- (d) None of these

B. State True or False:

1. Like charges attract each other.
2. A charged glass rod attract a charged plastic straw.
3. Lightning conductor cannot protect a building from lightning.
4. Earthquakes can be predicted in advance.

C. Answer the following questions in short:

1. Sometimes, a crackling sound is heard while taking off a sweater during winters. Explain.
2. Explain why a charged body loses its charge if we touch it with our hand.
3. Name the scale on which the destructive energy of an earthquake is measured. An earthquake measures 3 on this scale. Would it be recorded by a seismograph? Is it likely to cause much damage?
4. Suggest three measures to protect ourselves from lightning.
5. Explain why a charged balloon is repelled by another charged balloon whereas an uncharged balloon is attracted by another charged balloon.
6. Describe with the help of a diagram an instrument which can be used to detect a charged body.
7. List three states in India where earthquakes are more likely to strike.
8. Suppose you are outside your home and an earthquake strikes. What precaution would you take to protect yourself?
9. The weather department has predicted that a thunderstorm is likely to occur on a certain day. Suppose you have to go out on that day. Would you carry an umbrella? Explain.
10. Mention three precautions that you will take to protect yourself if earthquake strikes when you are inside the house.
11. Explain why it is safer to use a wireless telephone instead of a landline telephone?

Stars and solar system

A. Tick (✓) the correct option:

1. Which of the following is NOT a member of the solar system?
(a) An asteroid
(b) A satellite
(c) A constellation
(d) A comet
2. Which of the following is not a planet of the sun?
(a) Sirius
(b) Mercury
(c) Saturn
(d) Earth
3. Phases of the moon occur because:
(a) we can see only that part of the moon which reflects light towards us
(b) our distance from the moon keeps changing
(c) the shadow of the earth covers only a part of moon's surface
(d) the thickness of the moon's atmosphere is not constant
4. Farthest planet of solar system at present is:
(a) Uranus
(b) Pluto
(c) Mercury
(d) Neptune

B. Fill in the blanks:

1. The planet which is farthest from the sun is
2. The planet, which appears reddish in colour is
3. A group of stars that appear to form a pattern in the sky is known as a
4. A celestial body that revolves around a planet is known as
5. Shooting stars are actually not
6. Asteroids are found between the orbits of and

C. State True or False:

1. Pole star is a member of the solar system.
2. Mercury is the smallest planet of the solar system.
3. Uranus is the farthest planet in the solar system.
4. INSAT is an artificial satellite.
5. There are nine planets in the solar system.
6. Constellation Orion can be seen only with a telescope.

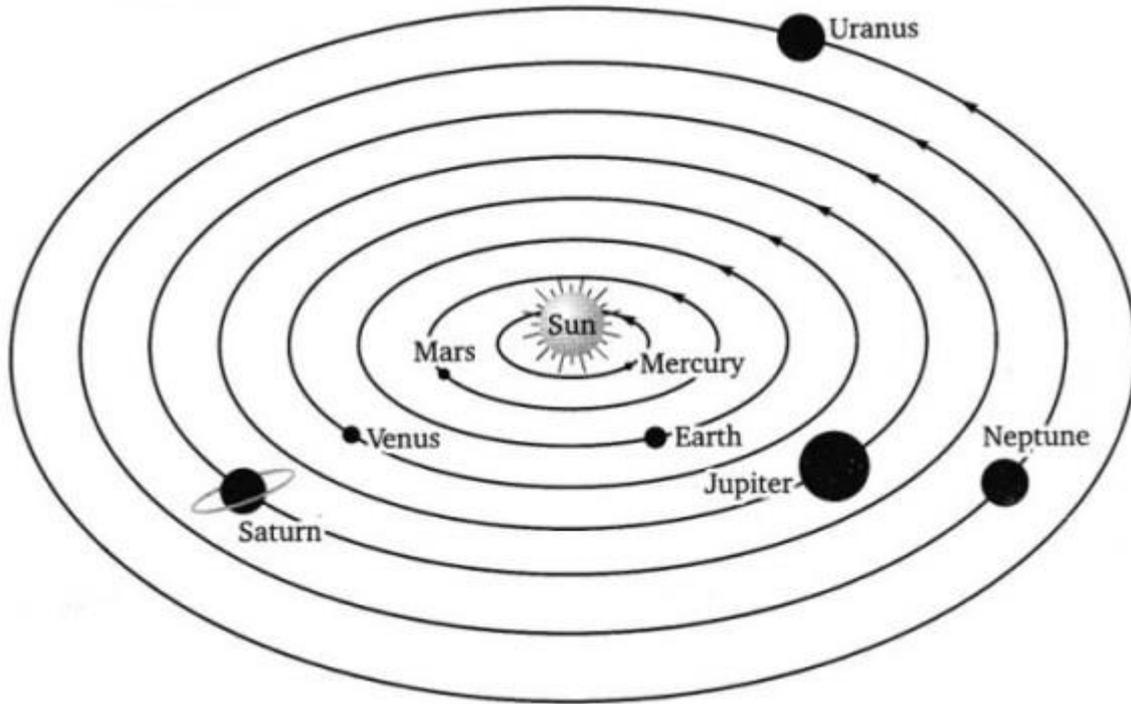
D. Match the following:

'A'	'B'
1. Inner planets	a. Saturn
2. Outer planets	b. Pole star
3. Constellation	c. Great Bear
4. Satellite of the earth	d. Moon
	e. Earth
	f. Orion
	g. Mars

E. Answer the following questions in short:

1. In which part of the sky can you find Venus if it is visible as an evening star?
2. Name the largest planet of the solar system.
3. What is constellation? Name any two constellations.
4. Draw sketches to show the relative positions of prominent stars in
 - (a) Ursa Major
 - (b) Orion.
5. Name two objects other than planets which are members of the solar system.
6. Explain how you can locate the Pole Star with the help of Ursa Major.
7. Do all the stars in the sky move? Explain.

8. Why is the distance between stars expressed in light years? What do you understand by the statement that a star is eight light years away from the earth?
9. The radius of Jupiter is 11 times the radius of the earth. Calculate the ratio of the volumes of Jupiter and the earth. How many earths can Jupiter accommodate?
10. Boojho made the following sketch of the solar system. Is the sketch correct? If not, correct it.



11. Can we talk on the moon?
12. Why can't we see stars during the day?

pollution

A. Answer the following questions in short:

1. What are the different ways in which water gets contaminated?
2. At an individual level, how can you help reduce air pollution?
3. Clear, transparent water is always fit for drinking. Comment.
4. You are a member of the municipal body of your town. Make a list of measures that would help your town to ensure the supply of clean water to all its residents.
5. Explain the differences between pure air and polluted air.
6. Explain circumstances leading to acid rain. How does acid rain affect us?
7. Describe the 'Greenhouse Effect' in your own words.
8. Prepare a brief speech on global warming. You have to deliver the speech in your class.
9. Describe the threat to the beauty of the Taj Mahal.
10. Why does the increased level of nutrients in the water affect the survival of aquatic organisms?
11. How can we reduce, reuse and recycle water?
12. A lot of dry leaves are collected in a school garden and are burnt everyday. Do you think that it is right to do so? If not, what should be done to dispose off the dry leaves?

B. Tick (✓) the correct option:

1. Which of the following is not a greenhouse gas?

- (a) Carbon dioxide
- (b) Sulphur dioxide
- (c) Methane
- (d) Nitrogen

2. The exhaust from CNG vehicles contains too much of:

- (a) SPM
- (b) sulphur dioxide
- (c) carbon monoxide
- (d) none of these

3. Of the total water on earth, freshwater is:

- (a) 97.4%
- (b) 2.6%
- (c) 2.0%
- (d) 0.01%

4. Fertilisers and pesticides are the main cause of:

- (a) water pollution
- (b) soil pollution
- (c) air pollution
- (d) food poisoning

5. Air pollution can be prevented by:

- (a) burning fuels like wood and coal
- (b) deforestation
- (c) using biogas and solar energy as fuels
- (d) volcanic eruption

C. Fill in the blanks:

- 1. Algae can be used to produce oxygen by the process.
- 2. Suspended particles of dust, smoke and sand are called
- 3. Two examples of greenhouse gases are and
- 4. or can be used to kill the disease causing microorganisms present in water.

D. State True or False:

- 1. There are no alternatives for fossil fuels.
- 2. Water pollution is caused by the waste water given out by the factories.
- 3. Waste water from agricultural land do not cause water pollution.
- 4. CNG contains sulphur which forms sulphur dioxide upon burning.
- 5. Clean fuels like natural gas do not contribute to the greenhouse gases.

E. Match the following:

‘A’	‘B’
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1. Water pollution	a. CO ₂
2. Air pollution	b. CFCs
3. Global warming	c. Acid rain
4. Ozone layer depletion	d. Fertilizers, pesticides
5. Corrosion of statues, buildings	e. Oxides of nitrogen and sulphur