

Grade 8 Stars and the Solar System Worksheets

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.

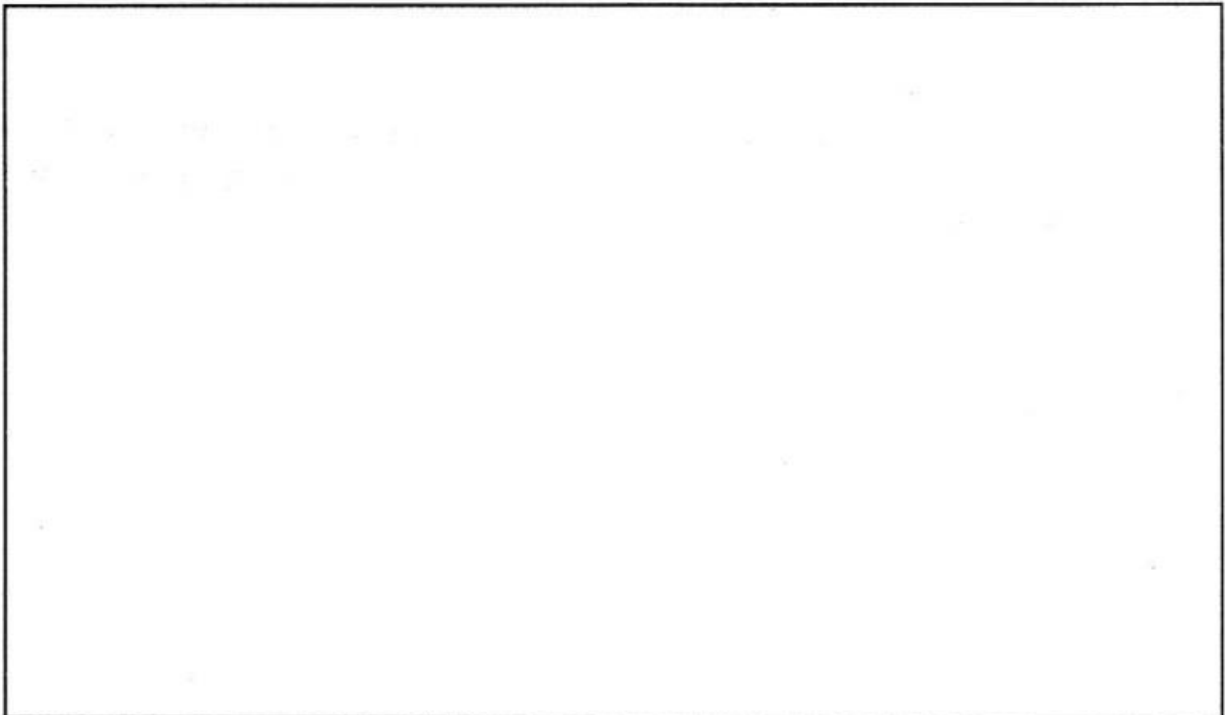
4. INSAT is an artificial satellite.
5. There are nine planets in the solar system.
6. Constellation Orion can be seen only with a telescope.

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

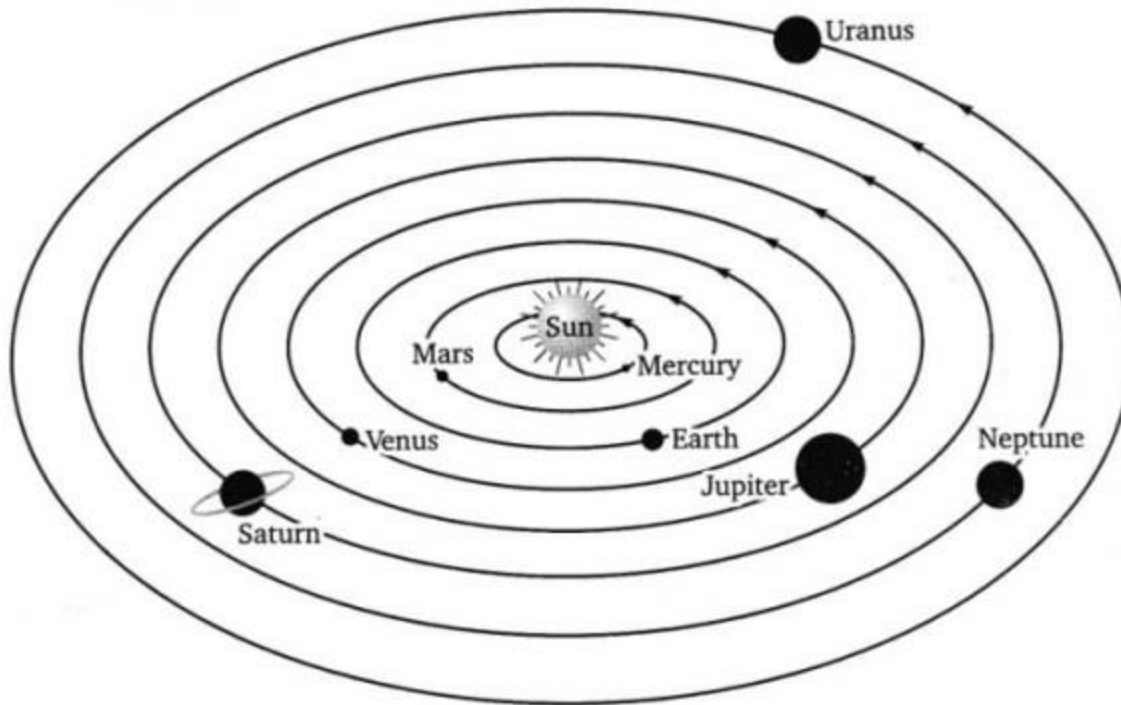
E. Answer the following questions in short:

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 accomodate?
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?

F. Solve the following riddle and try to make similar riddles yourself:

My first is in VAN but not in PAN
 My second is in Earth and also in HEAVEN
 My third is in ONE and not in TWO
 MY fourth is in BUN and also in FUN
 MY last is in STAR but not in RADAR
 I am a planet that moves round the Sun.

G. India has a vast network of its artificial satellites working for different purposes. Try to find out any two such satellites and their main purpose:

a. Name of Satellite

- (1)
- (2)

b. Purpose

- (1)
- (2)

H. Complete the table:

Name of Planet	Approximate radius (assuming earth as 1 unit)	Approximate distance from the sun (assuming distance of the earth as 1 unit)	Period of revolution	Period of rotation
Mercury				
Venus				
Earth				
Mars				
Jupiter				
Saturn				
Uranus				
Neptune				