

Date: \_\_\_\_\_

## Chapter 9, Practice Worksheet (9.B.3)

1. Shadows are formed when light is blocked.

In the pictures below, you have 2 different shadows.

sun's  
position  
is on the  
left



picture 1

shadow to the right

Sun is high in the sky



picture 2

a. Draw the Sun's position in each picture.

b. Describe the shadows in each picture in terms of length and position.

Picture 1: the shadow is long and to the side ( opposite side of the sun)

Picture 2: the shadow is short and under the tree

c. Predict the time in picture 2. 12:00 pm (noon)

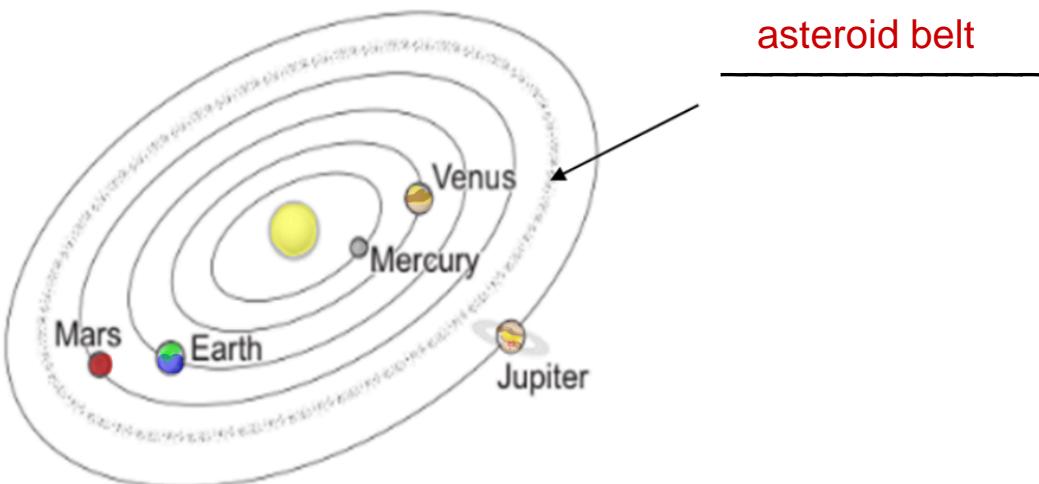
d. If the time in picture 1 was 7 o'clock in the **evening**.

**Draw the shadow and the position of the Sun**

**at 7 o'clock in the morning.**



2. The diagram shows parts of our Solar System.



a. Label the object the arrow points at.

b. Write the name of the object which all planets are orbiting.

**Sun**

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c. Three planets are missing from this diagram of the Solar System.

Write down the names of two of these missing planets.

**Saturn**

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**Uranus**

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3. Hassan is learning about the Solar System.

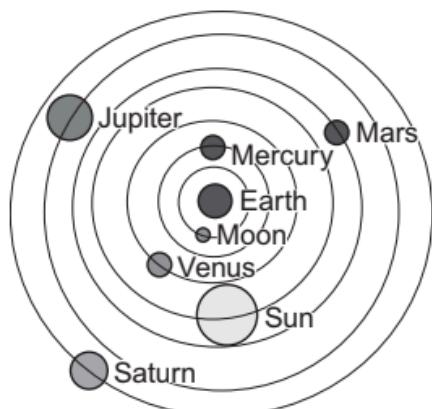
He finds this model on the internet.

Hassan says this model is wrong.

Write down **one** reason why Hassan is correct.

**The Sun should be at the centre.**

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4. Venus, Mars and Earth have day and night.

Explain why these planets have day and night.

Each one of them spins on its axis.

5. Tick (✓) if the statement is True or False.

	True	False
The moon is a planet.		✓
We have 9 planets in our Solar System.		✓
Our solar system is a part of the Milky Way galaxy.	✓	
There are billions of galaxies in our universe.	✓	
The planets revolve around the Earth.		✓

Q6. Robo and Izzy are having a conversation about the Sun.

Robo



The Sun moves across  
the sky, because Earth rotates  
around the sun.

Izzy



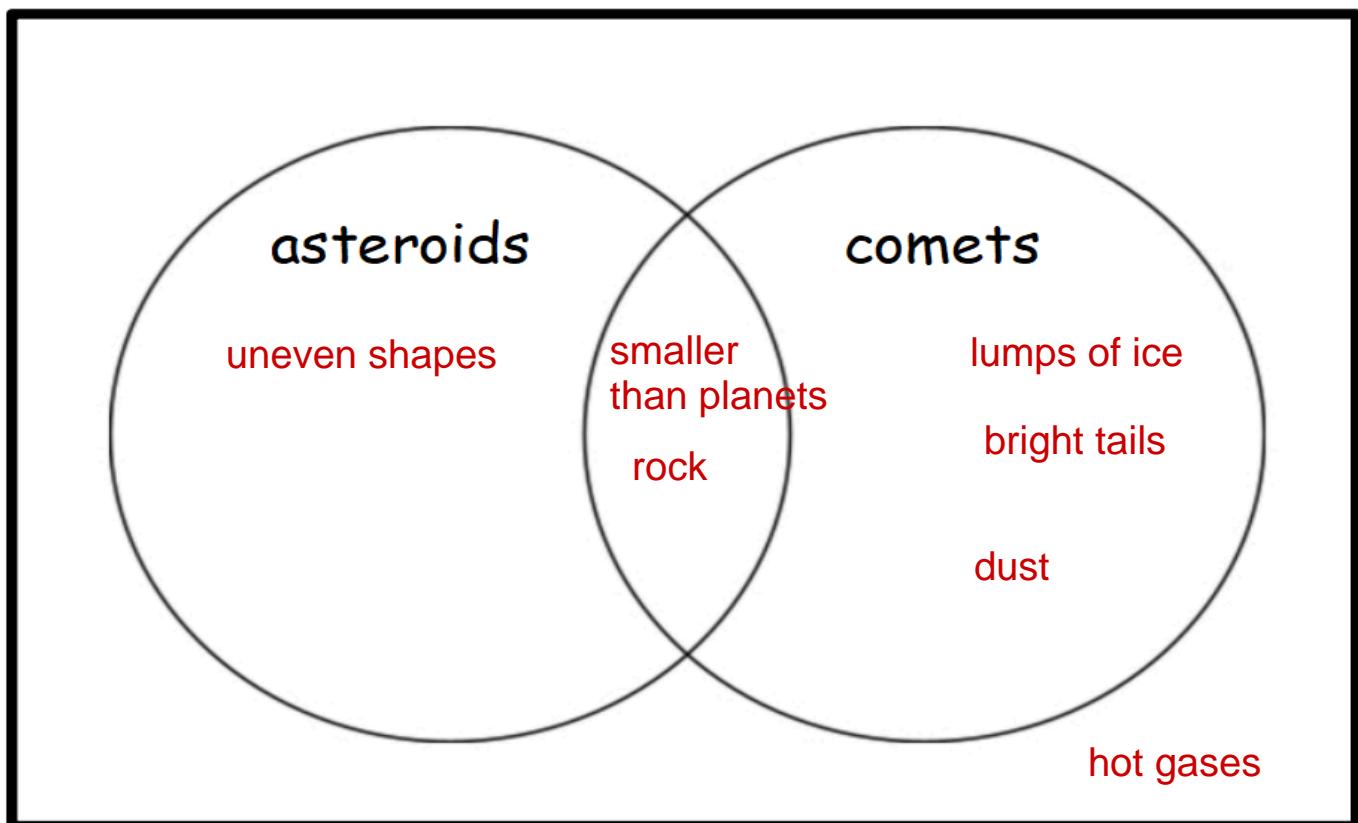
The Sun appears to  
move because the  
Earth is spinning on its  
axis.

- Circle the name of the student who is correct.

7. Our Solar System is made up of stars and planets and other objects like asteroids and comets.

Use the words below to fill in the **Venn diagram** and compare the objects.

lumps of ice	rock	bright tails	hot gases	dust	uneven shapes	smaller than planets
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8. Fill in the blanks.

planets : large objects that move around a star

axis : imaginary line that goes through the centre of an object, about which the object spins

planetary system: Systems that contain a star and objects like planets, asteroids and comets moving around it

Solar system : planetary system made up of the Sun and objects that move around it

comets : lumps of ice dust and rock that move around the Sun

asteroids : small, rocky objects that move around the Sun