

# Space Unit Review

Can you answer the following questions?

- What is the solar system comprised of?
- What are stars, constellations?
- Why do planets shine?
- What is bioluminescence?
- What are the parts of the sun?
- Name each planet and give two descriptive characteristics about the planet's environment.
- How are the term revolution and rotation different?
- Name and describe 5 objects in the solar system.
- Why does Mars undergo retrograde motion?

Complete the following questions?

## 1. Matching Planet descriptions

	Planet		Description
c	Earth	a.	It has more mass than all the other planets combined.
e	Saturn	b.	It is the closest to the Sun.
g	Venus	c.	It's atmosphere contains oxygen.
b	Mercury	d.	It is not a gas planet, or an inner planet.
f	Mars	e.	It has more than a 1000 rings around it.
d	Pluto	f.	It appears reddish in colour.
h	Uranus	g.	It has the hottest surface temperature because of its carbon dioxide environment.
a	Jupiter	h.	Its rotation is different from the other planets.

## 2. Labeling Name each of the following planets:

Draw the solar system

### 3. Matching

#### Other Objects in the Solar System

	Term		Definition/Description
<b>d</b>	Asteroid	a.	The ring of asteroids around the sun.
<b>a</b>	Asteroid belt	b.	Travels around the sun. Its head is composed of frozen gases, ice and dust.
<b>i</b>	Moons	c.	A bright streak in the sky caused by a burning meteoroid, usually burn up before hitting the Earth.
<b>e</b>	Satellites	d.	A small rocky object.
<b>c</b>	Meteor	e.	An object that revolves around a planet or another object i.e. the moon.
<b>b</b>	Comet	f.	A lump of rock or metal that is pulled through the Earth's atmosphere.
<b>f</b>	Meteoroid	g.	Jupiter's moon.
<b>g</b>	Europa	h.	
<b>h</b>	Meteorite	i.	A natural satellite, many planets have more than one.

### 4. Fill in the Blanks

#### Comparing Planets and Stars

Feature	Planet	Star
Location	In the solar system	Far beyond the solar system
Distance from Earth	Fairly near	Very far
Real size	Smaller than most stars	Usually larger than planets
Reason we see object	Reflects light from the sun	Gives off its own light
Surface temperature	Usually very cool or cold	Very hot
What object is made of	Usually rocks or gases	Gases under high pressure and temperature
Observable feature	Has a steady light	Appears to twinkle
Long-term observable feature	Very slowly moves through some constellation	Appears to move as part of a constellation

### 5. Definitions

Astronomy: The study of what is in space beyond Earth.

Constellation: A group of stars that seem to form a shape or pattern.

Solar system: A system that comprises the sun and all the objects that travel around it.

Nonluminous: The state of an object, such as a planet, that makes them visible when light is reflected off of them.

Star: A large body of matter that emits huge amounts of energy.

Planet: A sphere shaped object that follows a certain path around a star.

Retrograde motion: The apparent backward loop made by planets such as Jupiter and Mars.

## **6. Short Answer: Galaxies**

1. What is a galaxy? How are they classified?

**Galaxies are a huge collection of gas, dust, and hundreds of billions of stars. They are classified according to their shapes.**

2. Draw an example of the three types of galaxies?

**Spiral**

**Elliptical**

**Irregular**

3. Arrange the following in order of size, starting with the largest: star cluster, galaxy, universe, star, planet.

**Universe    galaxy    star cluster    star    planet**