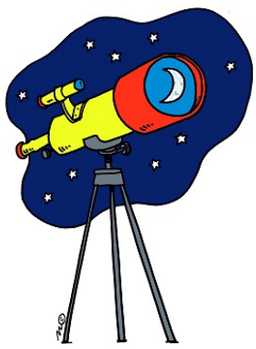
INTERMEDIATE SCIENCE 9

UNIT 1 SPACE: STUDY GUIDE FOR TEST 1

Know the following terms :

Astronomy	Universe	Space	Celestial body
Galaxy	Star	Planet	Solar System
Constellation	Ursa	Asterism	Polaris
Circumpolar constellations	Ellipse	Orbit	Ecliptic
Rotation	Revolution	Asteroid	Comet
Geocentric Universe	Heliocentric universe	Stone circle	Astrolabe
Sunspot	Solar Flares	Solar Prominences	
Solar Radiation	Solar Wind	Auroras	



Know the following:

1. Describe and explain the apparent motion of celestial bodies. Include:

    i. moon
    ii. sun
    iii. planets
    iv. comets
    v. asteroids

2. List examples of constellations and recognize them on a sky chart. Include:

    i. Ursa Major, the Great Bear (including the Big Dipper)
    ii. Ursa Minor, the Little Bear (including the Little Dipper)
    iii. Orion
    iv. Cassiopeia
    v. Leo

3. Identify that celestial bodies move in cyclic paths called orbits and that these orbits result from gravitational forces.

4. Identify that planets, suns, and moons revolve on a central axis.

5. Describe the contributions made by various individuals to our knowledge and understanding of celestial bodies and their motions. Include:

    i. Aristotle
    ii. Ptolemy
    iii. Copernicus
    iv. Galileo
    v. Kepler
    vi. Newton

6. Identify early technologies that advanced scientific observations about the solar system. Include:

   i. stone circles
   ii. astrolabe
   iii. telescope

7. Describe the composition and characteristics of the sun

Criteria	Characteristics
Mass	contains 300 000 times more mass that Earth
Motion	rotates
Composition	contains hydrogen and helium atoms
Function	chemical reactions in the sun give off electromagnetic radiation, including heat and light which support life in our solar system
Special Features	contains sun-spots, solar flares and solar prominences

8. Describe the characteristics of the sun. Include:

   (i) sun-spots
   (ii) solar flares
   (iii) solar prominences

9. Define and describe how the following phenomena affect life on Earth

   (i) solar radiation
   (ii) solar wind
   (iii) auroras

KNOW THE FOLLOWING QUESTION	
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