**Astronomy Concept Review**

**Scientific evidence suggests the universe formed about 13.7 billion years ago**

1. The universe is believed to have formed about 13.7 billion years ago in a moment of sudden, rapid expansion. This is the Big Bang theory of the universe’s formation.
2. Much evidence collected today by astronomers supports the Big Bang theory.
3. A shift in the spectra of galaxies shows that all galaxies are moving away from each other.
4. Galaxies have many different shapes and characteristics.
5. Within galaxies, stars often form in distinct patterns called star clusters.

**Unimaginably vast distances separate the components of the universe**

1. Stars go through different stages in their life cycles.
2. A shift toward the red part of the spectrum indicates a star is moving away from Earth.
3. The Sun is the centre of our solar system, and eight planets revolve around it
4. The planets in order from the sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune
5. Earth spins, or rotates, on its axis as it revolves around the Sun
6. Distances between stars and galaxies are measured in light-years.
7. Triangulation and parallax are techniques used to calculate distances to stars.

**Human understanding of Earth and the universe continues to increase through observation and exploration.**

1. Models of the solar system have improved as better technology has been developed
2. The appearance of the Moon changes as it revolves around Earth.
3. Seasons are created by Earth’s tilt and revolution.
4. Aboriginal peoples of British Columbia have long observed the nature of celestial bodies and used this knowledge to guide many activities in their daily lives.