**Earth Science Semester 1 (Quarters 1 & 2) Study Guide**

**Sixth Grade Chapter 1, 3 & 4**

Name: Date:

*Study Strategy: ALL questions are Multiple Choice, Matching, or True/False. This means the correct answer does NOT have to be generated ONLY recognized.*

**Chapter 1 Earth, Moon and Sun**

1) Why does Earth have seasons?

2) Define gravity?

3) On what does the strength of gravity’s force depend? and

4) Define inertia.

5) State Newton’s Law of Universal Gravitation.

6) The phase of the moon that is seen from Earth depends on what?

7) Why can you never see the far side of the moon from Earth?

8) What are PHASES of the moon?

9) During a solar eclipse, what is the position of the E, M, and S?

10) A total solar eclipse can only be seen from a person standing within where?

11) What is meant by “equinox”?

12) What causes tides?

13) During high tide, what is the position of the E, M, and S?

14) How large is the moon compared to Earth?

15) Why does the moon’s temperature vary greatly?

**Chapter 3 The Solar System**

1) Geocentric model

2) Heliocentric model

3) Astronomical unit

4) Criteria to be a planet (3)

5) Age of Our Solar System

6) How solar system was formed: p. 86

7) In what layer of the sun does nuclear fusion take place?

8) When you look at an image of the sun, what layer are you seeing?

9) What are solar winds?

10) What are the main characteristics of the inner planets?

11) What are the factors of Earth that allows life to survive?

12) What is the greenhouse effect?

13) Which inner planet has an extreme greenhouse effect condition?

14) What are the main characteristics of the outer planets?

15) What is Jupiter’s Red Spot?

16) Which planet’s axis of rotation is tilted at an angle of about 90 degrees from the vertical?

17) Where in our solar system do most asteroids reside?

18) Where in our solar system do most comets originate?

19) Difference between meteoroids, meteors, and meteorites.

**Chapter 4 Stars, Galaxies, and the Universe**

1) Define scientific notation.

2) Define light year.

3) Stars are classified according to what five characteristics?

4) What does composition mean?

5) Do high-mass or low-mass stars have a longer lifecycle?

6) How is the length of a star’s life is determined?

7) What size star dies from a supernova explosion?

8) Know the life cycle of both a mid-mass and large-mass star (flow chart)

8) According to the Big Bang Theory, the universe formed how many years ago?

9) What is Hubble’s Law?

10) What is dark energy? p. 156

11) What is dark matter? p. 156