Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 13: Earth, Moon, and Beyond Vocabulary**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The star at the center of the solar system. p. 400
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- To spin on its axis. P.400
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- An imaginary line that passes through Earth’s center and its North and South Poles. p. 400
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- To travel in a closed path around another object. p. 402
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The path one body takes in space as it revolves around another body. p. 402
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- An imaginary line around Earth equally distant from the North and South Poles. p. 402
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Any natural body that revolves around a planet. p. 408
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- a low, bowl-shaped area on the surface of a planet or moon. p. 408
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- One of the shapes the moon seems to have as it orbits Earth. p. 411
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- An event that occurs when one object in space passes through the shadow of another object in space. p. 412
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The bending of light as it moves from one material to another. p. 412
12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- A huge ball of very hot gases in space. p. 416
13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- A group of separate elements that work together to accomplish something. p. 491
14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- A pattern of stars named after a myth or religious figure, an object, or an animal. p. 417
15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- A body that revolves around a star. p. 419
16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Everything that exists, including such things as stars, planets, gas, dust, and energy. p. 422
17. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- A grouping of gas, dust, and many stars, plus any objects that orbit those stars. p. 422

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 13: Earth, Moon, and Beyond Lesson 1: How Does Earth’s Orbit Affect the Seasons? P. 400-404 Strand:** 1.2.C.a. – Describe how changes in state provide evidence that matter is too small to be seen.

6.2.C.a. - Identify that Earth rotates once every 24 hours.

6.2.C.c. - Relate the apparent motion of the Sun, Moon, and stars in the sky to the rotation of

the Earth.

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_ is the star at the center of the solar system. It appears to rise in the \_\_\_\_\_\_\_\_\_\_\_ and sets in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It reaches its highest point in the sky at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (P. 400)
2. The cycle if day and night occurs as Earth rotates on its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Earth’s axis is the imaginary line that passes through the North and South Poles. When Earth faces the sun, it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in that place. When that place faces away from the sun, it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (P. 400)
3. Our system of time is based on Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of daylight and darkness. In 1884, standard times were set up in \_\_\_\_\_\_\_\_ time zones around the world. Each zone represents \_\_\_\_\_\_ of the hours of the day. Traveling west from one time zone to the next, the time becomes \_\_\_\_\_\_\_ hour earlier. (p. 401)
4. In the middle of the Pacific Ocean is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. If you go west across that line, you travel into the \_\_\_\_\_\_\_\_ day. If it’s 3 AM Tuesday, it will be 2 AM Wednesday. The US has 7 time zones from Puerto Rico to Hawaii. (P. 401)
5. During the summer, there are \_\_\_\_\_\_\_\_\_\_\_\_ hours of daylight, and the temperatures are usually \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In the winter, there are \_\_\_\_\_\_\_\_\_ hours of daylight, and the temperatures are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The seasonal changes are a result of the tilt of the Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (P. 402)
6. In addition to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on its axis, Earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a path around the sun. (P. 402)
7. The path earth takes as it revolves is its\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. One orbit takes \_\_\_\_\_\_\_\_ days, or one year. (P. 402)
8. Some think we have seasons because Earth is closer to the sun in the summer than in winter. That isn’t so. Earth is actually closer in the winter. It’s the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that produce the seasons. (P. 402)
9. Earth’s axis in not straights, up and down, in relation to its orbit. If it was the sun’s rays and not the tilt that hit the Earth, the seasons would be the same all year long. But, Earth axis is tilted \_\_\_\_\_\_\_\_\_ degrees. During part of the year, half of the Earth is tilted \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the sun. On that part of the Earth, it’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. On the part of the Earth facing away from the sun, it’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (P. 402)
10. Earth is divided into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hemispheres by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The equator is an imaginary line going all the way around Earth, halfway between the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Poles. (P. 402)
11. The day of the year when the amount of daylight is greatest is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_ . (P. 403)
12. The day of the year when the amount of daylight is the least is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_. (P. 403)
13. Halfway between the solstices, neither hemispheres are tilted toward the sun, and the hours of daylight and darkness are about the same. These days are known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In the Northern Hemisphere, the autumn equinox is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_. The spring equinox is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (P. 403)
14. Seasons at the North and South Poles are very different from seasons anywhere else. In the summer, the poles get \_\_\_\_\_\_\_ months of daylight, and \_\_\_\_\_\_\_ darkness. In the winter, they get \_\_\_\_\_\_\_ months of darkness and \_\_\_\_\_\_ daylight. At the equator, days and nights are about \_\_\_\_\_\_\_\_ hours each all year long.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 13: Earth, Moon, and Beyond Lesson 2: How Do Earth and the Moon Compare? P. 408-412**

**Strand:** 6.1.A.b. – Observe and identify the moon orbit the Earth in about a month.

6.2.B.a. - Sequence images of the lit portion of the moon seen from Earth as it cycles day-to- day in about a month in order of occurrence.

6.2.C.a. - Identify that Earth rotates once every 24 hours.

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a natural body that revolves around a planet. Earth and its moon are similar in several ways. Both are rocky and fairly dense. Both are made up of many of the same elements; including \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Both have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 408
2. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a low bowl-shaped area on the surface of a planet or moon. P. 408
3. There are important differences between the Earth and the moon. One clear difference is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The moon’s diameter is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is only about \_\_\_\_\_\_\_of Earth’s diameter. P. 408
4. The moon’s pull of gravity is only about \_\_\_\_\_\_\_ of Earth’s. A person who weighs 800 Newtons (180 lbs.) on Earth, only weighs 133 Newton (30 lbs.) on the moon. P. 408
5. The moon, unlike Earth, has almost no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and no liquid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Temperatures on the moon can range from more than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ during the day, to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at night. Earth’s temperatures are much less extreme. P. 409
7. Most objects that fall toward Earth burn up in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ before they reach the ground. Most craters on Earth are worn down by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Objects that fall to the moon do not burn up because there is hardly any \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 409
8. The Earth revolves around the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the moon revolves around \_\_\_\_\_\_\_\_\_\_\_\_\_. When the moon is closest to Earth, it is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ away. Both, the Earth and moon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as they revolve. The moon rotates more slowly. It rotates every \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ days around Earth. P. 410
9. The moon is often bright at night, but it doesn’t give off its own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. As the moon orbits the Earth, its position in the sky changes. The part of the moon that is exposed to the sun reflects the sun’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 410
10. The way the moon looks from Earth changes daily. At any time, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the moon is lit by the sun. How much of the moon you see depends on the moon’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 411
11. A moon’s phase is \_\_\_\_\_\_\_\_\_\_\_\_\_ of the shapes the moon seems to have during it orbit (there are 8 phases). When the moon is between Earth and the sun, you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ see the moon. This is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 411
12. The moon’s cycle of phases take 29 ½ days. During the cycle, the visible portion of the moon changes gradually. Starting with the \_\_\_\_\_\_\_\_\_\_\_\_\_ moon, you see more and more each day until the\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moon. Then you see less and less each day until the next \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moon. P. 411
13. An\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occurs when one body in space blocks light from reaching another body in space. Eclipses we see on Earth are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eclipses and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eclipses. They are alike because they happen when the Earth, sun, and moon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The difference is, a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eclipse occurs when the moon (always in a new moon) casts a shadow on Earth. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eclipse occurs when the moon (always in a full moon) passes the shadow of the Earth. Earth blocks the sun’s light from reaching the moon. The moon does not look black at this time; instead it looks \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because Earth’s atmosphere bends red light, which reflects off of the moon. This bending of light is know and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ P. 412
14. Because the moon and Earth are not always in proper alignment, partial solar and lunar eclipses occur \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ times each, per year. P. 412

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 13: Earth, Moon, and Beyond Lesson 3: What Makes Up Our Solar System? P. 416-424**

**Strand:** 6.1.A.a.- Observe and identify the Earth is one of several planets with a solar system that orbits the sun.

6.1.A.c.- Identify that planets look like stars and appear to move across the sky among the stars.

1. The sun is a\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a huge ball of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in space. P. 416
2. The sun is at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of our solar system. P. 416
3. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is made up of a star and all the planets and other objects that revolve around that star. P. 416
4. The sun is the source of much of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on Earth. Plants use energy from the sun to make\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and store energy. Animals eat plants for that food energy. P. 416
5. The sun is huge; a\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Earths could fit inside it! P. 416
6. One way the scientists classify stars is by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Star colors range from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, to \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The color of the star is a clue to it surface \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Blue stars are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stars are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 417
7. Another way the stars are classified is by brightness. How bright a star is depends on \_\_\_\_\_\_\_\_\_\_ factors; how far it is from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and how \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it actually is. P. 417
8. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a pattern of stars that is named after a religious, or mythical object or animal. P. 417
9. Our solar system includes \_\_\_\_\_\_\_\_ (8 planets and Pluto) planets. A planet is a body that revolvers around a star. A planet is held in its orbit by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between the planet and the star. P. 417
10. Scientists have divided the 9 planets into 2 groups; there are 4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planets and 5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planets. The planets are separated by the huge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between Mars and Jupiter. The asteroid belt is a ring-shaped area where many small, rocky bodies, or asteroids are located. P. 419
11. The four inner planets are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and dense. P. 419
12. Mercury, which is the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet to the sun, is about the size of Earth’s moon. It has almost no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and is covered with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The side of Mercury facing the sun is hot, about\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ degrees, and the side facing away from the sun is very cold, about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ degrees. P. 419
13. Venus is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_t object in the night sky. It is the \_\_\_\_\_\_\_\_\_\_\_\_ closest planet to the sun. It’s about the same size as \_\_\_\_\_\_\_\_\_\_\_\_\_, and it’s \_\_\_\_\_\_\_\_\_\_\_\_\_. Venus can become very hot, reaching 460 degrees C, or 860 degrees F. It’s even hotter than Mercury because its thick \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ keeps the heat from escaping. P. 419
14. Earth, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ closest planet to the sun, and is the only planet to support life because of its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The atmosphere maintains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in which living things can survive. P. 419
15. Mars is the\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet from the sun, and is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet because of its reddish soil. It’s atmosphere is mostly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Its valleys are evidence that Mars once had water. Mars has the largest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the solar system, and its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ storms can last for months. P. 419
16. The first 4 planets closest to the sun (Mercury, Venus, Earth, and Mars) are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because they are composed mostly of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 420
17. Beyond the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the 5 outer planets (Jupiter, Saturn, Uranus, Neptune, and Pluto). P. 420
18. Jupiter is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet from the sun. It is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet in the solar system. It has rings and dozens of moons, including Ganymede, the largest moon in the solar system. There is a huge storm on Jupiter that has lasted for about \_\_\_\_\_\_\_\_\_\_\_\_\_\_ years. The storm’s name is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 420
19. Saturn, the \_\_\_\_\_\_\_ planet from the sun, is best known for its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. They are made up of \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Saturn also has dozens of moons. P. 420
20. Uranus, the \_\_\_\_\_\_\_\_\_ planet from the sun, also has many moons and rings. It is tilted on its axis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that the other planets. It looks like a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that has fallen over, but is still spinning. P. 420
21. Neptune, the \_\_\_\_\_\_\_\_\_\_\_\_\_ planet from the sun, has several rings and moons, and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in the solar system. The winds can reach speeds of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. P. 420
22. Pluto, the \_\_\_\_\_\_\_\_\_\_\_ planet from the sun is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. it is small and rocky. It has an unusual orbit. It has a single moon named \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that is half the size of the Pluto. P. 420
23. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is everything that exists; the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. On a dark night, you may look overhead and see what looks like ribbons of stars. These ribbons are part of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the galaxy that includes our solar system. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is gas, dust, and a group of stars, including any objects orbiting those stars. P. 422
24. The Milky Way Galaxy has more than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stars and is one of the largest galaxies in the universe. P. 422

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 13: Earth, Moon, and Beyond Study Guide**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The path that Earth takes as it moves around the sun.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- The sun is at the center of this.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Everything that exists; the planets, the stars, dust, and gases.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- This is made up of stars, dust, and gases.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- this means to travel in a path around another object.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- this divides Earth into the Northern and Southern Hemispheres.
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- this is when one body in space blocks light from reaching another object.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- This is a bowl-shaped, low place on a surface.
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ This is a natural body that revolves around a planet.
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- This is a pattern of stars.
11. In comparing Earth and the moon, both are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and dense.
12. During summer, when the Northern Hemisphere is tilted toward the sun, the Southern Hemisphere is tilted away from the sun, producing the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ season.
13. Earth is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet from the sun.
14. Earth’s seasons are determined by its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
15. Earth’s rotation takes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. Earth’s revolution around the sun takes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
17. Moons orbit around the Earth takes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ days.