**Unit 5 – Astronomy Vocabulary**

1. **Asteroid:**A small, rocky object that orbits the sun; most asteroids are located in a band between the orbits of Mars and Jupiter
2. **Astronomy:**The study of the moon, stars, and other objects in space
3. **Big Bang Theory:**(cosmology) the theory that the universe originated 14-20 billion years ago from the cataclysmic explosion of a small mass of matter at extremely high density and temperature
4. **Climate:**Seasonal pattern of weather conditions in an area over many years; does not change rapidly
5. **Comet:**A ball of ice and dust whose orbit is usually a long, narrow ellipse.
6. **Copernicus:**Devised a model of the universe with the Sun at the center, and not earth. Heliocentric model.
7. **Day:**24 hours. The length of time it takes the earth to ROTATE / SPIN one time.
8. **Ellipse:**An oval
9. **Galaxy:**A collection of stars, dust, and gas bound together by gravity
10. **Gas Giants:**The name given to the four outer planets: Jupiter, Saturn, Uranus, and Neptune
11. **Gravity:**A force of attraction between objects that is due to their mass and their distance from one another.
12. **Life cycle of a Star:**nebula-protostar-main sequence star-red giant-super nova- black hole OR neutrons star
13. **Light Year:**the distance light travels in one year
14. **Lunar Eclipse:**Earth blocks sunlight from reaching the moon
15. **Meteor:**A streak of light in the sky produced by the burning of a meteoroid in Earth's atmosphere.
16. **Month:**A division of the year that is based on the orbit of the moon around the Earth. Each month is 28-31 days long. a MOONth.
17. **Moon Phases:**The changing appearances of the Moon as seen from Earth
18. **Neap Tide:**A less than average tide occurring at the first and third quarters of the moon
19. **Newton, Isaac:**English scientist . Discover gravitation
20. **Nuclear Fusion:**nuclear reaction producing light and heat
21. **Orbit:**The path of an object as it revolves around another object in space
22. **Ptolemy:**Alexandrian astronomer who proposed a geocentric (Earth in Center) system of astronomy that was undisputed until Copernicus (2nd century AD)
23. **Revolution:**The movement of one object around another. The Earth's year-long elliptical orbit around the sun. The moon's orbit around the Earth every 28 days.
24. **Rotation:**The spinning of Earth on its axis
25. **Satellite (moon):**an object that orbits a planet
26. **Solar Eclipse:**The blocking of sunlight to Earth that occurs when the moon is directly between the sun and Earth.
27. **Solar System:**the collection of eight planets and their moons in orbit around the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets.
28. **Spring Tide:**When the tidal range is greatest. (full moon and new moon)
29. **Terrestrial Planets:**The name given to the four inner planets: Mercury, Venus, Earth, and Mars.
30. **Tide:**the periodic rise and fall of the sea level under the gravitational pull of the moon
31. **Universe:**All of space and everything in it
32. **Vernal/Autumnal Equinox:**12 hours daylight/12 hours of night (March 20th and Sept 20th)
33. **Waning phases:**Phases of the moon during which less of the moon's near side is lit each night. Light on LEFT!
34. **Waxing phases:**During the waxing phases, more of the Moon's near side is lit each night. Light on the RIGHT.
35. **Winter/Summer Solstice:**The shortest and longest days of the year (Winter 12/21 and Summer 6/21)
36. **Year:**365 days, the time it takes the earth to REVOLVE around the sun