Class: _____ Date: ____

STAAR Earth and Space Vocabulary

- 1. Abrasion-the grinding and wearing away of rock surfaces by contact with other rock pieces.
- 2. Acid rain-rain with a pH below 5.6.
- 3. Air mass-a large body of air that has the same properties throughout.
- 4. Air pressure-the weight of the air pressing at a given location.
- 5. Aquifer-an area that has a large amount of groundwater (water underneath the ground).
- 6. Asteroid-a small, rocky body that revolves around the Sun.
- 7. Asthenosphere-the soft layer within the mantle that flows like a very thick liquid.
- 8. Astronaut-a person who travels into space from the United States of America.
- 9. Axis-an imaginary line that runs through the center of a planet from one pole to the other.
- 10. Big Bang Theory-a scientific theory of the origin of the universe that holds that all matter and energy were once packed into a tiny particle smaller than a piece of dust, which suddenly started to expand.
- 11. Chemical weathering-a process that breaks rock down into smaller pieces as a result of chemical reaction.
- 12. Chromosphere-a layer of the sun's atmosphere, above the photosphere.
- 13. Comet-a body of ice, dust, and small, gritty particles that orbits the Sun.
- 14. Conduction-the transfer of heat by direct contact of particles.
- 15. Continental crust-the lighter, older, and thicker part of the crust, which makes up the continents.
- 16. Continental drift-the slow movement of the continents across Earth's surface.
- 17. Contour interval-the differences in elevation between any two contour lines.
- 18. Contour line-a line on a topographic map that connects areas with the same elevation.
- 19. Convection-the transfer of heat in fluids by the movement of currents (low temps sinking, hot rising) that form in fluids.
- 20. Core-Earth's innermost layer.
- 21. Coriolis Effect-the curving of the paths of winds and ocean currents because of Earth's rotation.
- 22. Corona-the outermost layer of the Sun's atmosphere.
- 23. Crust-the outermost layer of Earth.
- 24. Deep current-a convection current in the ocean that results from difference in temperature and density.
- 25. Density-the ratio of mass to volume of a substance.
- 26. Earthquake-the shaking of the Earth's surface due to plate movement.
- 27. Elliptical galaxy-a galaxy that has an oval or near spherical shape.
- 28. Elliptical orbit-an orbit shaped like a flattened circle or elongated oval.
- 29. Equator-an imaginary line that divides Earth horizontally.
- 30. Equinox-a point in Earth's orbit when the planet is tilted neither toward nor away from the Sun.
- 31. Erosion-a process by which weathered rock is picked up and moved to new places.
- 32. Fault-a break, or crack, in Earth's surface along which rock has moved.
- 33. Field study-a scientific investigation carried out in a natural setting.
- 34. Fold-a ripple in Earth's crust formed when rock layers are squeezed together and pushed upward.
- 35. Fossil fuel-an energy resource that formed over millions of years from the decayed remains of ancient plants and animals.
- 36. Front-the boundary between two air masses.
- 37. Full moon-the phase when all of the whole sunlit side of the moon faces Earth.
- 38. Galaxy-a very large group of starts, solar systems, space dust, and gases held together by gravity.
- 39. Geothermal energy-heat energy from inside Earth that can be used to heat buildings and produce electricity.

- 40. Glacier-a large mass of ice that moves slowly over land.
- 41. Global wind-a wind that blows steadily in a path for thousands of kilometers.
- 42. Groundwater-water that is below Earth's surface.
- 43. Heat-the flow of thermal energy.
- 44. Hertzsprung-Russell diagram-a graph that plots the relationship between a star's average surface temperature and its brightness; also called H-R diagram.
- 45. High tide-a tide when the water is at its highest level.
- 46. High pressure area-an area where the air is slowly sinking.
- 47. Hot spot-an area of volcanic activity near the middle of a tectonic plate.
- 48. Humidity-the amount of water vapor in the air.
- 49. Hydroelectric energy-energy obtained from the kinetic energy of flowing water.
- 50. Igneous rock-rock that forms when melted rock (magma or lava) cools and hardens.
- 51. Inner planets-the four planets closest to the sun (Mercury, Venus, Earth, and Mars).
- 52. International Space Station (ISS)-a research laboratory that orbits Earth.
- 53. Irregular galaxy-a galaxy that does not have a particular shape.
- 54. Island arc-a long, curved chain of islands that form from volcanic activity.
- 55. Lava-melted rock that reaches Earth's surface.
- 56. Light-year-the distance that light travels in one year-about 9.5 trillion kilometers.
- 57. Lithosphere-Earth's crust and the rigid upper part of the mantle.
- 58. Low tide-a tide when the water is at its lowest level.
- 59. Low pressure area-an area where the air is slowly rising.
- 60. Luster-the way a mineral reflects light.
- 61. Magma-melted rock below Earth's surface.
- 62. Mantle-the middle layer of Earth, located between the crust and the core.
- 63. Mechanical weathering-a process that breaks rock into smaller pieces by physical means without changing its chemical composition.
- 64. Metamorphic rock-rock formed from other rock changed chemically by high heat and pressure inside Earth.
- 65. Meteor-a streak of light produced by a meteoroid passing through Earth's atmosphere.
- 66. Meteorite-a meteoroid that lands on Earth.
- 67. Meteoroid-a small piece of rock that breaks free from an asteroid or comet and travels through the solar system.
- 68. Mid ocean ridge-a large chain of volcanic mountains on the ocean floor, formed where lava erupted between oceanic plates.
- 69. Milky Way-the spiral galaxy to which the sun belongs.
- 70. Mineral-a solid, nonliving material that is made up of crystals and is usually found in the ground.
- 71. Model-a representation of an object, system, or process.
- 72. Mohs scale-a way to rank the hardness of minerals from 1 to 10, with 1 being the softest and 10 being the hardest.
- 73. Moon-a natural body that revolves around a planet.
- 74. Neap tide- a tide with the least difference between high tide and low tide.
- 75. Nebula-a huge cloud of gas and dust particles in space.
- 76. New moon-the phase when the whole sunlit side of the moon faces away from Earth.
- 77. Nonrenewable energy resource-a natural energy supply that cannot be replaced as quickly as it is used.
- 78. Northern hemisphere-the half of Earth north of the equator.
- 79. Ocean basin-a part of Earth's surface covered by ocean water.

- 80. Oceanic crust-the rock that makes up the ocean floor.
- 81. Orbit-the path that a revolving body follows.
- 82. Outer planets-the four planets farthest from the sun (Jupiter, Saturn, Uranus, and Neptune).
- 83. Pangaea-a large landmass of the distant past that included all of today's continents.
- 84. Parallax-the apparent shift in the position of an object when viewed from two different places.
- 85. Phase-a shape of the sunlit portion of the moon visible from Earth.
- 86. Photosphere-the surface of the sun, which gives off most of the light that Earth receives.
- 87. Planet-a round body in space that moves in a curved path around a star, such as our sun.
- 88. Plate boundary-the region where two tectonic plates meet.
- 89. Renewable energy resource-a natural energy supply that is replaced as quickly as it is used or that cannot be used up.
- 90. Revolution-the movement of a body in space around another body.
- 91. Rift valley-a valley that forms as two continental plates pull apart and new crust forms in the space between them.
- 92. Rock cycle-the process through which rock slowly but continuously changes from one type of rock to another.
- 93. Rotation-the spinning of a planet (or other body) on its axis.
- 94. Runoff-water that flows over land.
- 95. Satellite-an object that revolves around another object, such as a planet.
- 96. Satellite image-a photograph taken from a satellite.
- 97. Seafloor spreading-the process in which new ocean floor forms from magma released at boundaries between two oceanic plates.
- 98. Sediment-small pieces of broken down rock that is deposited in a new place usually by wind, water, gravity, or ice (glaciers).
- 99. Sedimentary rock-rock formed when layers of sediment are compacted and cemented together.
- 100. Seismic wave-a wave of energy that travels away from the center of an earthquake in all directions.
- 101. Solar energy-energy from the sun.
- 102. Solar flare-a sudden explosion on the sun's surface.
- 103. Solar prominence-a huge, reddish loop of gas above the surface of the sun.
- 104. Solar system-a star and all the planets, moons, and other objects that revolve around it.
- 105. Solstice-a point in Earth's orbit when a hemisphere is tilted toward or away from the sun as far as possible.
- 106. Southern hemisphere-the half of Earth south of the equator.
- 107. Space probe-an unmanned spacecraft used to explore other parts of the solar system.
- 108. Spectroscope-a device that can analyze visible light by acting like a prism.
- 109. Spiral galaxy-a galaxy that has "arms" that wind outward from the center, resembling a pinwheel.
- 110. Spring tide-a tide with the greatest difference between high tide and low tide.
- 111. Star-a sphere of hot, glowing gases (H, He) that gives off its own light and is held together by gravity.
- 112. Star cluster-a group of stars with similar characteristics that are located near each other.
- 113. Streak-the color of the powder left behind by rubbing a mineral on a plate.
- 114. Subduction zone-the region where one tectonic plate slides under another tectonic plate.
- 115. Sunspot-a dark area on the sun's surface.
- 116. Surface current-a current in the ocean caused by wind moving across the surface of the ocean.
- 117. Sustainable use-taking no more of a resource than can be replaced.
- 118. Tectonic plate-one of the large section into which the lithosphere is broken.

- 119. Theory of natural selection-a scientific theory stating that organisms that are best suited to a particular environment are most likely to survive and reproduce.
- 120. Theory of plate tectonics-a scientific theory stating that Earth's crust is made up of several rigid plates that move on the Asthenosphere.
- 121. Thermal energy-the energy of the moving particles that make up all matter.
- 122. Tidal energy-energy obtained by harnessing the kinetic (moving) energy of the rise and fall of ocean tides.
- 123. Tide-the regular rise and fall of the surface of Earth's oceans.
- 124. Topographic map-a map that shows the elevation of natural and artificial features of a region.
- 125. Volcano-an opening in Earth's surface through which magma is released.
- 126. Waning-decreasing; used to describe phases of the moon when less of the lit side is becoming visible from Earth.
- 127. Watershed-an area of land that drains into a stream, river, lake, or other body of water.
- 128. Waxing-increasing; used to describe phases of the moon when more of the lit side is becoming visible from Earth.
- 129. Weather-the condition of the atmosphere at a certain time and place.
- 130. Weathering-a process by which rock is broken down into small pieces.
- 131. Wind-moving air.
- 132. Wind energy-energy obtained from moving air.