6th Grade Science Final Exam Study Guide Name: <u>Key</u> Science Exam Date: Thur. May 27th

- 1. Define Erosion: The movement of small rock particles by wind, water, ice or gravity.
- 2. Define Weathering: The mechanical or chemical breaking down of rock into sediment.
- 3. What 2 factors determine the rate of weathering? Type of rock & the climate of the area
- 4. What is soil made of? Weathered rock, mineral fragments, water, air & decayed matter
- 5. Define sediments. Small solid pieces of material that come from rocks (sand, silt, or clay) or organisms
- List 4 ways humans can reduce soil erosion: Plant vegetation, insert drainage pipes, plant on curves, reduce plowing, and rotate different crops
- List ways to conserve water in your home. Turn off water while brushing your teeth, shorter showers, collect water in a bucket while shower water is getting hot
- 8. Seasonal changes on Earth are caused by the 23.5 degree tilt of Earth on its axis.
- 9. When it is summer in the Northern hemisphere, it is winter in the Southern hemisphere.
- 10. Does land absorb radiation (heat) from the sun faster or slower than water? faster
- 11. What are the two major gases in the atmosphere? Nitrogen and Oxygen
- 12. Which layer of Earth's atmosphere contains the highest concentration of ozone? stratosphere
- 13. If an air mass forms over the Gulf of Mexico, what 2 properties would the air mass have (Polar or Tropical? & Continental or Maritime?) Tropical Maritime
- 14. Large, dark rain clouds that produce thunderstorms and tornadoes are called cumulonimbus.
- 15. What happens to warm and cold air in a convection current in the atmosphere? Warm air rises and cold air falls, the cycle repeats over and over
- Define tornado. Whirling columns (funnel shaped cloud) of air extending from the ground to the base of storm clouds
- 17. What are 3 possible causes of global warming? Burning of fossil fuels, deforestation (cutting down of trees), CFCs in aerosol sprays
- 18. The Big Bang Theory is one theory that describes how our universe began forming.
- 19. Our Solar System is located in the Milky Way Galaxy on a spiral arm called Orion's arm.
- 20. Define the heliocentric model of our solar system. Sun is at the center of the Solar system.
- 21. Meteor is also called a shooting star.
- 22. Comet has a tail that is blown away from the sun by solar winds.
- 23. Kate sees a full moon, when will she see the next full moon? In about 1 month or 4 weeks
- 24. What phase must the moon be in to allow for a lunar eclipse? Full
- 25. What phase must the moon be in to allow for a solar eclipse? **New**
- 26. One full **rotation** of Earth on its axis takes about 1 day.
- 27. One full **revolution** of Earth around the Sun takes about 1 year.
- 28. Where are most asteroids found in our Solar System? In the Asteroid Belt between the orbits of Mars and Jupiter
- 29. Define galaxy. A huge group of single stars, star systems, star clusters, gas & dust held together by gravity.
- 30. Which planet is the hottest due to the extreme greenhouse effect trapping heat in its atmosphere? Venus
- 31. Using complete sentences explain the 3 sides of the Health Triangle and give 2 examples of how you could balance each side of your own triangle. YOUR ANSWERS WILL VARY

The <u>physical</u> side of the Health Triangle refers to the condition of your body. I can balance the physical side of my triangle by exercising 3-5 times a week, get 8-9 hours of sleep, and eat from all areas of the Food Pyramid.

The <u>mental/emotional</u> side of the Health Triangle refers to your thoughts, feelings and emotions. I can balance the mental/emotional side of my triangle by studying and learning, dealing with stress by relaxing, and accepting myself for who I am.

The <u>social</u> side of the Health Triangle refers to the way you relate to others. I can balance the social side of my triangle by working well in groups, talking to family and friends more, and planning activities to get together.