

**6<sup>th</sup> Grade Science Final Exam Study Guide**  
**Science Exam Date: Thur. May 27<sup>th</sup>**

Name: Key

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**
6. List 4 ways humans can reduce soil erosion: **Plant vegetation, insert drainage pipes, plant on curves, reduce plowing, and rotate different crops**
7. 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**
16. 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 physical 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 mental/emotional 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 social 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.