Name: Date:

8th Grade Science Quarter 3 Exam Review

Life Science:

- 1. Organ systems: organs that make them up and function.
- 2. What is metabolism?
- 3. What is cellular respiration?
- 5. What is photosynthesis? Know the formula.
- 6. Which reproduction, asexual or sexual, produces genetically identical cells?
- 7. What is the function of DNA?
- 8. What are abiotic and biotic factors in an ecosystem?
- 9. Be able to use a dichotomous key to identify an organism.
- 10. What are the affects of bacteria on humans?
- 11. Be able to use a punnet square to identify the genotype and phenotype of offspring.
- 12. What is a food web?

Scientific Method:

13. Be able to identify the parts of an experiment such as the control group or experimental/manipulated group.

Astronomy:

- 14. What effect does rotation and revolution both have on Earth?
- 15. What causes tides? What position is the Earth, Moon and Sun in during a Spring tide?
- 16. What happens to the period of revolution for the planets as they move farther away in position from the sun?
- 17. How do eclipses occur?
- 18. How long does it take for the moon to go through all the phases?

Physical Science:

- 19. At what point on a roller coaster does the car have the most kinetic energy?
- 20. What happens to molecules in a substance as it is heated?
- 21. What is an element? A compound?

- 22. What is the law of conservation of matter?
- 23. How is density calculated?
- 24. What is a physical change? A chemical change?
- 25. What is speed? How can you calculate average speed?
- 26. What is Newton's second law of motion?
- 27. Be able to calculate the net force acting on an object.

Weather & Climate:

- 28. What 2 characteristics are used to classify air masses? If an air mass forms over Canada what would you expect the temperature and moisture to be?
- 29. On a weather map what does the "H" and "L" stand for? What does that tell you about the weather?
- 30. How does weather move across the United States?
- 31. In the water cycle where does condensation, precipitation, transpiration and evaporation occur?