Life Sciences 11 Mitosis Verses Meiosis Name:

**Directions:** *Write answers next to the question. Draw pictures on the back of this page, in order and in colour!* Pages 244-248 (mitosis) of your textbook and pages 275-278 (meiosis) might be a good place to start!

1. Describe the purpose of mitosis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. How many times does the cell divide during mitosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What kind of cells are produced at the end of mitosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. What are sister chromatids? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Briefly describe what happens during prophase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Draw and label picture of what a cell looks like during prophase. *Draw on the back of page.*

7. Briefly describe what happens during metaphase \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Draw and label a picture of what a cell looks like during metaphase. *Draw on the back of page.*

9. Briefly describe what happens during anaphase \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Draw and label a picture of what a cell looks like during anaphase. *Draw on the back of page.*

11. Briefly describe what happens during telophase \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Draw and label a picture of what a cell looks like during telophase. *Draw on the back of page.*

13. Is cytokinesis part of mitosis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Briefly describe what happens during cytokinesis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. Draw a picture of what a cell looks like during cytokinesis. *Draw on the back of page.*

16. Describe the purpose of meiosis \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. How many times does the cell divide during Meiosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18. What kind of cells are produced at the end of meiosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. Briefly describe the difference of prophase I & II. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. Draw and label a picture of prophase I & II. *Draw on the back of page.*

21. Briefly describe the difference of metaphase I & II. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. Draw and label a picture of metaphase I & II. *Draw on the back of page*.

23. Briefly describe the difference of anaphase I & II. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. Draw and label a picture of anaphase I & II. *Draw on the back of page.*

25. Briefly describe the difference of telophase I & II. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

26. Draw and label a picture of telophase I & II. *Draw on the back of page.*

**Mitosis**

Interphase

Prophase

Metaphase

Anaphase

Telophase

Cytokinesis

**Meiosis I**

Interphase

Prophase I

Metaphase I

Anaphase I

Telophase I

Cytokinesis

**Meiosis II**

Prophase II

Metaphase II

Anaphase II

Telophase II

Cytokinesis