**Meiosis Flip Book**

**(March 18, 2013)**

**Materials**: 14 index cards; coloring pencils; textbook.

**Directions**: Using your textbook (**Page 273** for Whale; **page 276** in Dragonfly book) draw and explain the phases of meiosis. On the front of the card (non-lined side) illustrate **AND** color the stage. Also write the name of the stage that is illustrated. On the back side (lined side) write a 2-3 sentence description of the phase. For example:

**Interphase I**

* **Metabolic activities of the**

 **cell continue.**

* **DNA replicates.**

**Side 1 (Non-lined side);**

**Illustration and Label;**

**(and colored)**

**Illustrationand Label**

**Side 2- Characteristics of the phase.**

The cards must be assembled in the proper sequence. This sequence is given to you below:

1. Card 1: **Title Card** (will include three items)**:**
* Write “**Meiosis Flip Book**” and **your name** on the front of this card. Also, on the front of this card, draw a **picture of** **an analogy** that represents the process of meiosis.
1. Card 2: **Interphase I.**
2. Card 3: **Prophase I.**
3. Card 4: A card illustrating the process of **“Crossing over” (**which occurs in

Prophase I)

* See page 277 of both the Whale and Dragonfly book. Hint: perhaps draw three sequences (labeled a,b,c) to show the progression of crossing over happening.
1. Card 5: **Metaphase I.**
2. Card 6: **Anaphase I.**
3. Card 7: **Telophase I.**
4. Card 8: **Cytokinesis I.**
* Your book combines Telophase I and Cytokinesis I. You are to separate them. Use your imagination. Remember in cytokinesis both cells will have completed separation, so you should have two separate cells illustrated. These cells are now in a “mini-interphase phase. Nuclear membrane should be back. Both cells will look like the illustration on card 2, except both will be slightly smaller.
1. Card 9: **Prophase II.**
2. Card 10**:**  **Metaphase II.**
3. Card 11**:**  **Anaphase II.**
4. Card 12**:**  **Telophase II.**
5. Card 13**:**  **Cytokinesis II.**
* See Card 8. There should be an illustration of **four cells** (all with nuclei returned).
1. Card 14**: Make a “T” Chart.**  **Listing 4 differences between mitosis and meiosis.**

**Mitosis**

**Meiosis**