Learning Target: I can describe and explain the importance of meiosis for genetic continuity.

Meiosis Interactive Activity

Prophase 1	**Metaphase 1**	**Anaphase 1**	**Telophase 1 & Cytokinesis**
Diploid cells	**Haploid cells**	**Mitosis**	**Meiosis**
Somatic cells	**Gamete cells**	**Prophase II**	**Metaphase II**
Anaphase II	**Telophase II & Cytokinesis**	**Zygote**	

Part 1 Directions: Use the words above to put the correct definition for the following descriptions.

1. For the second time spindle fibers pull each homologous chromosome pair to opposite ends of the cell. _____

2. Contain two complete sets of inherited chromosomes and two complete sets of genes. Body cells. 2(23) = 46 chromosomes. _____

3. Process in which the number of chromosomes per cell is cut in half through the separation of homologous chromosomes in a diploid cell. Process only occurs in sex cells. _____

4. Each copied chromosome pairs with its corresponding homologous chromosome and crosses over. Crossing over produces new combinations of alleles (traits) in the cell. _____

5. Only contain a single set of chromosomes, which means they only have a single set of genes. They contain half the number of chromosomes of diploid cells. Sex cells. N = 23 _____

6. Nuclear membrane forms around both sets of chromosomes and the cell splits. _____

7. A fertilized egg. The first cell of a new organism. _____

8. Sex cells. The male version is sperm. The female version is the egg. _____

9. The spindle fibers pull each homologous chromosome pair toward opposite ends of the cell. _____

10. Chromatids condense into chromosomes and become visible. _____

11. Paired homologous chromosomes line up in the middle of the cell and spindle fibers attach to them. _____

12. For the second time the paired the homologous chromosomes line up in the middle of the cell and the spindle fibers attach to them. _____

13. Now the nuclear membrane forms around the 4 sets of chromosomes and the cells split. The end result is four haploid daughter cells containing half the DNA of mitosis. _____

14. Process in which cells make complete copies of themselves for growth, repair, and replacement of cells. 2 identical daughter cells. Helps mature and grow individuals to the stage of puberty. _____

15. Only contain a single set of chromosomes/genes. Another name for gamete cells. _____

Created By: Chivas & Jordan Spivey

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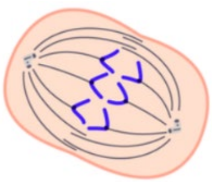
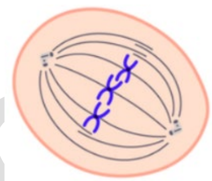
Part 2. Put the words under the correct diagram that they describe.

Prophase	**Zygote**	**Anaphase**	**Telophase & Cytokinesis**
Egg	**Metaphase**	**Mitosis**	**Meiosis**
Sperm			





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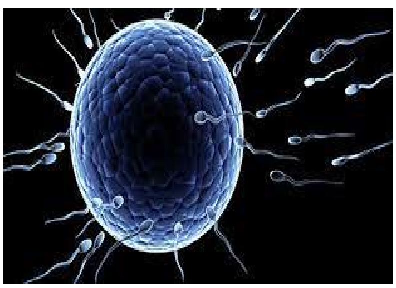

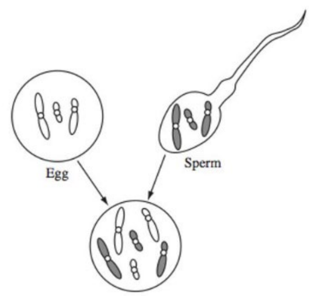

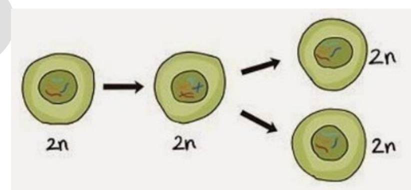

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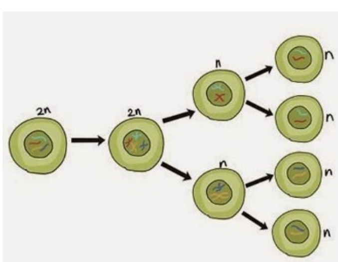

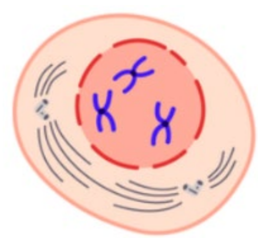

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