Topic: Mitosis vs. Meiosis Worksheet

Summary: Students answer introductory questions about the similarities and differences between mitosis and meiosis.

Goals & Objectives: Students will be able to compare and contrast between the cell cycle and meiosis. Students will be able to remember important facts about mitosis and meiosis.

Standards: CA 2a Students know that meiosis is an early step in sexual reproduction in which the pairs of chromosomes separate and segregate randomly during cell division to produce gametes containing one chromosome of each type.

Time Length: 15 minutes

Materials:
- Class textbook or lecture notes
- Photocopied worksheets
- Pencils or pens

Procedures:
1. Tell the students which section they are to use in the textbook or their associated lecture notes. Students are then going to read the section and answer the questions on the worksheet.

Accommodations: Students who cannot read at a high school level can be shown pictures in the book that help explain the answer. Give these students less problems to complete but they need to at least fill in the Venn diagram. Students with an IEP can take the handout home if they need extra time.

Evaluation:
Each question is worth 1/2 point, with the exception of question 15, which is worth 3 points. The assignment is worth a total of 10 points.
Mitosis vs. Meiosis Worksheet

1. What are the main purposes of mitosis? ____________________________________________

2. Mitosis is part of what cycle? ________________________________________

3. What type of cell undergoes mitosis? Circle one: reproductive sex cells or somatic cells

4. How does a daughter cell compare to the parent cell after undergoing mitosis? Circle one: identical to the parent or different than the parent

5. Does mitosis make haploid or diploid cells? Circle one: haploid or diploid

6. What n value are the cells which are made by mitosis? Circle one: n or 2n or 4n

7. What type of cell undergoes meiosis? Circle: reproductive sex cells or somatic cells

8. What are the two main types of gametes? ___________________________ ___________________________

9. What are gametes used for? ________________________________________

10. Does meiosis make haploid or diploid cells? Circle one: haploid or diploid

11. What n value are the cells which are made by meiosis? Circle one: n or 2n or 4n

12. How does a daughter cell compare to the parent cell after undergoing meiosis? Circle one: identical to the parent or different than the parent

13. What process in prophase 1 of meiosis makes every gamete different? ______________

14. Compare and contrast mitosis and meiosis by filling in the Venn diagram below.

Mitosis

Meiosis

Name: _________________________ Row: _______
Date: ___________ Period: _______