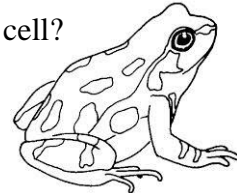


# Mitosis/Meiosis Sort: Alternative Assignment

## Circle an answer:

1. Mitosis **or** Meiosis: is the process by which a cell makes an exact copy of itself, resulting in two identical cells.
2. Mitosis creates: body cells **or** sex cells.
3. Cells from a tiger are found to have 19 chromosomes. These cells were most likely formed in the process of: mitosis **or** meiosis.
4. A daughter cell that has chromosomes genetically identical to the original cell was most likely produced by: mitosis **or** meiosis.
5. Which cells contain half the chromosomes of the original cell?
  - body cells
  - sperm cells
  - egg cells

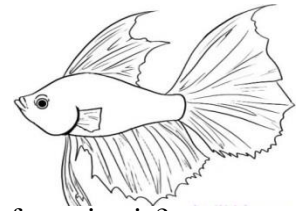


## Fill in the blanks:

6. Meiosis is the process by which the number of \_\_\_\_\_ is reduced by \_\_\_\_\_.
7. The process of \_\_\_\_\_ makes new cells so the body can grow.
8. After meiosis, \_\_\_\_\_ cells in males and \_\_\_\_\_ cells in females are produced.

## Short answer:

9. What is the purpose of meiosis?



## Calculate the number:

10. A bullfrog has 26 chromosomes. How many daughter cells are produced after mitosis? \_\_\_\_\_
11. A hippo has 36 chromosomes. After mitosis, how many chromosomes will be in each of the two daughter cells? \_\_\_\_\_
12. The sperm and egg cell of beta fish each contain 21 chromosomes. After fertilization, this new cell will go through mitosis to grow into a new fish. How many chromosomes will be produced in the mitosis daughter cells? \_\_\_\_\_

## Pick the picture:

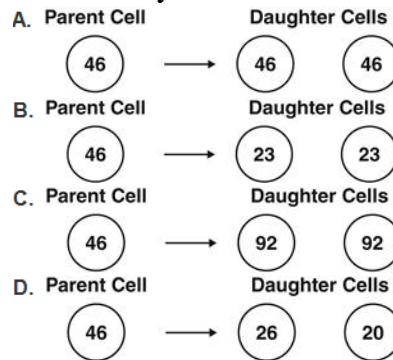
13. Which of the following shows the result of meiosis?



**original cell**

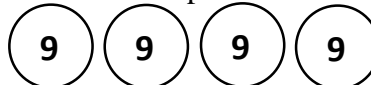
- a.**
- b.**
- c.**
- d.**

14. A human body cell has 46 chromosomes. Which diagram represents mitosis in a human body cell?



15. & 16. Correctly label the description **and** match to the correct picture:

\_\_\_\_\_ Daughter cells that are genetically identical to each other.



\_\_\_\_\_ Daughter cells that are genetically different from each other.

