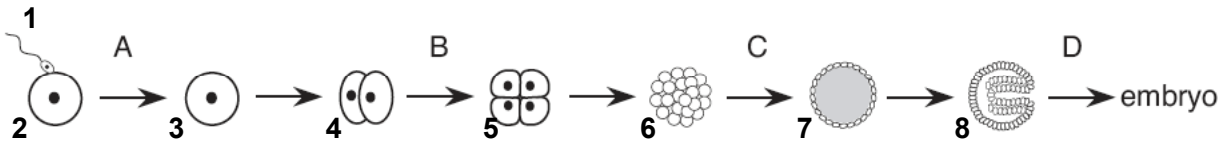


**MEIOSIS & MITOSIS PRACTICE 2**

Interpreting diagrams is an important skill in learning science. The following diagram illustrates some aspects of cell reproduction. Let's interpret the diagram by answering the questions.



1. Cell 1 is called a \_\_\_\_\_

2. Cell 2 is called a \_\_\_\_\_

3. Both Cell 1 & Cell 2 are in a class of special cells called \_\_\_\_\_

4. Both Cell 1 & Cell 2 were made by a special cell division process called \_\_\_\_\_

5. Explain the genetic purpose of that special cell division process that made Cell 1 & Cell 2.

\_\_\_\_\_

\_\_\_\_\_

6. Process A is called \_\_\_\_\_

7. Cell 3 is called a \_\_\_\_\_

8. Compare the number of chromosomes in Cell 3 to the number of chromosomes in Cell 1 and 2.

\_\_\_\_\_

9. Process B that made many cells from one cell is called \_\_\_\_\_

10. Compare the cells in Structure 4 to the cells Structure 5 and 6. Explain your answer

\_\_\_\_\_

\_\_\_\_\_

11. In Process D the cells are starting to change and do different jobs and form different organs. We call that process...

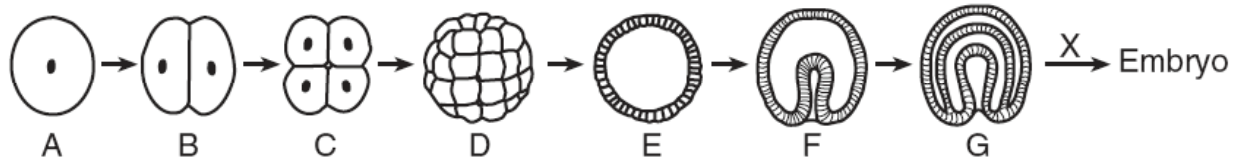
\_\_\_\_\_

12. If all the cells in the embryo have the same genetics (same chromosomes and same genes) then how can they be doing different jobs from each other?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



13. This entire sequence (A through embryo) started with

- a. the periodic shedding of a thickened uterine lining
- b. mitotic cell division in a testis
- c. meiotic cell division in the placenta
- d. the process of fertilization

14. If cell A has 46 chromosomes, how many chromosomes will most likely be found in each cell of stage G?

- a. 23
- b. 46
- c. 69
- d. 92

15. The arrow labeled X represents the process of

- a. meiosis
- b. recombination
- c. differentiation
- d. cloning