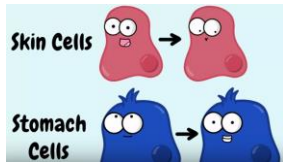


Name: _____

Date: _____

Cell Cycle with the Amoeba Sisters



Find the video at <https://www.youtube.com/watch?v=f-lDpgEfAHI> or search Youtube for amoeba sisters mitosis

1. Mitosis makes cells that are _____

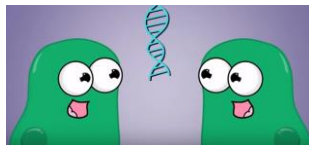
Interphase

2. Which activities happen during S of Interphase?

- 1
- 2
- 3

3. Where is DNA found? _____

4. What is DNA? _____



5. How does the DNA in the new cells compare to the original cell? _____



6. Inside the nucleus DNA is organized into _____

7. How many chromosomes do humans have? _____

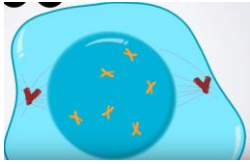


8. When is DNA replicated (synthesized)? _____

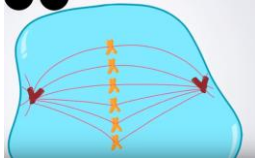


9. Fill in the MITOSIS phase names below:

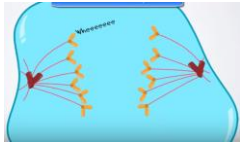
P _____ M _____ A _____ T _____



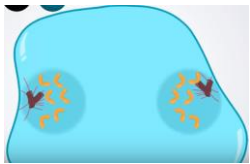
10. In Prophase, what happens to nucleus and DNA? _____



11. In metaphase where are chromosomes? _____



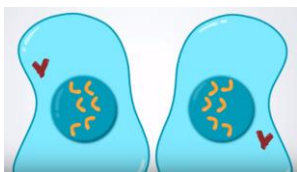
12. In anaphase the chromosomes _____



13. In telophase where are the chromosomes? _____

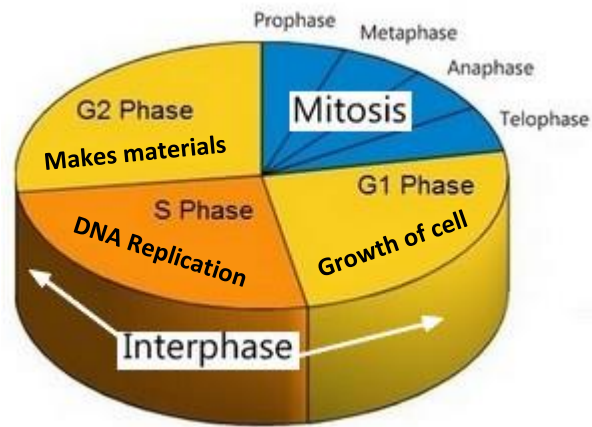
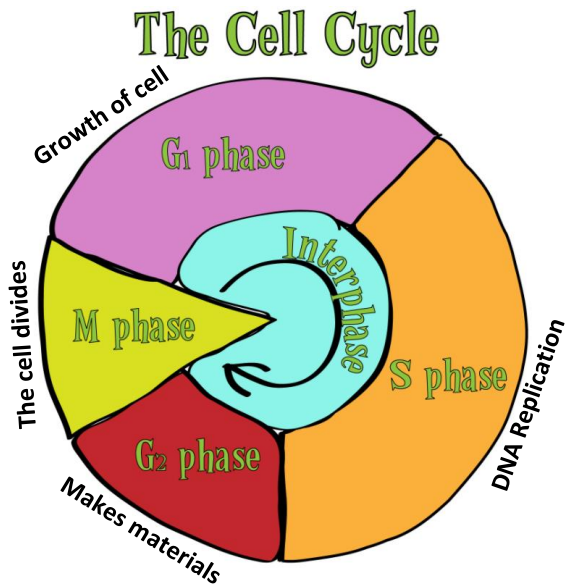
14. How many chromosomes will each new human cell have? _____

15. How will the two new cells compare? _____



16. What is the final process that splits the cells? _____

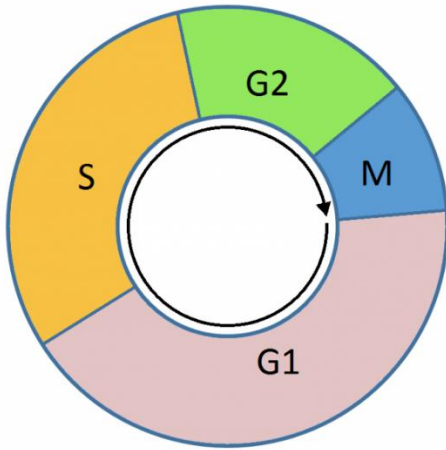
What is going on during Interphase of the cell cycle?



Study the images above. Answer the following questions.

- What are the 3 phases of Interphase?
 - S, G2, M
 - G2, M, G1
 - M, G1, S
 - G1, S, G2
- What are the four phases of Mitosis?
 - G1, S, G2, M
 - Prophase, Metaphase, Anaphase, Telophase
 - Interphase, G1, S, G2
 - Mitosis, S, M, Interphase
- Which part of the cell cycle is longer?
 - Mitosis
 - Interphase
- When does DNA Replicate?
 - G1
 - S
 - G2
 - Mitosis
- What happens in G1?
 - The cell grows
 - The cell makes materials
 - The cell divides
 - The cell replicates DNA
- What happens in S?
 - The cell grows
 - The cell makes materials
 - The cell divides
 - The cell replicates DNA
- What happens in G2?
 - The cell grows
 - The cell makes materials
 - The cell divides
 - The cell replicates DNA
- What happens in Mitosis?
 - The cell grows
 - The cell makes materials
 - The cell divides
 - The cell replicates DNA

9. Fill in the blanks on the right with the phase each event occurs in.



_____ DNA Synthesis (replication)

_____ Cell Division



10. Uncontrolled cell growth leads to

a. Cancer

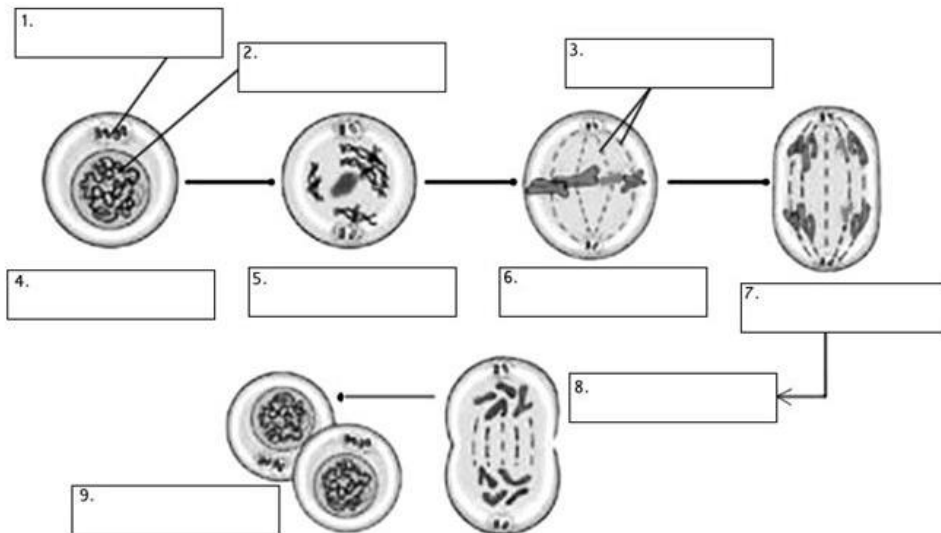
b. Disease

c. Healthy cells

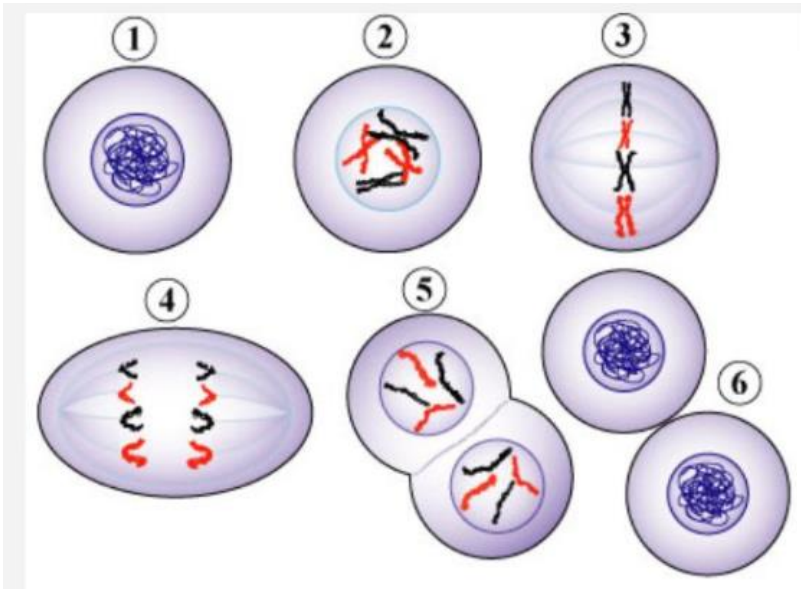
d. Cell death

11. Write in the phases of the Cell Cycle (Interphase + Mitosis):

Use **Interphase**, **Prophase**, **Metaphase**, **Anaphase**, **Telophase** and **Cytokinesis**

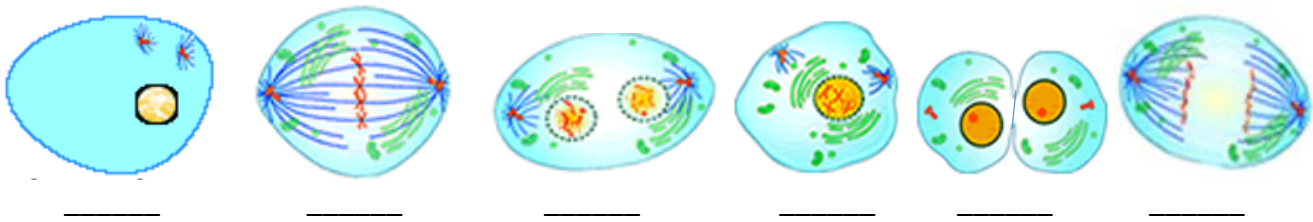


12. Name the Cell Cycle phases below. **Word Bank: Prophase, Anaphase, Interphase, Telophase**

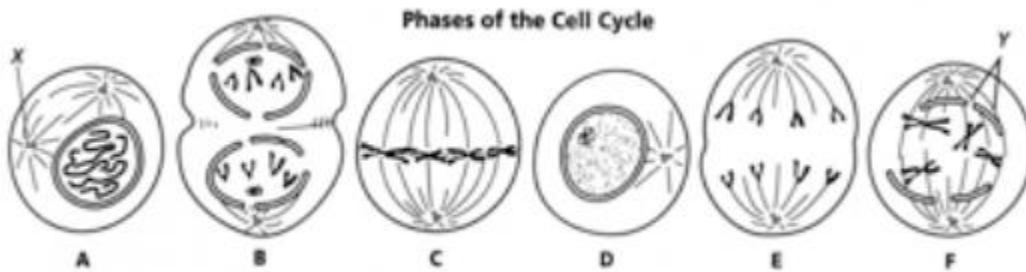
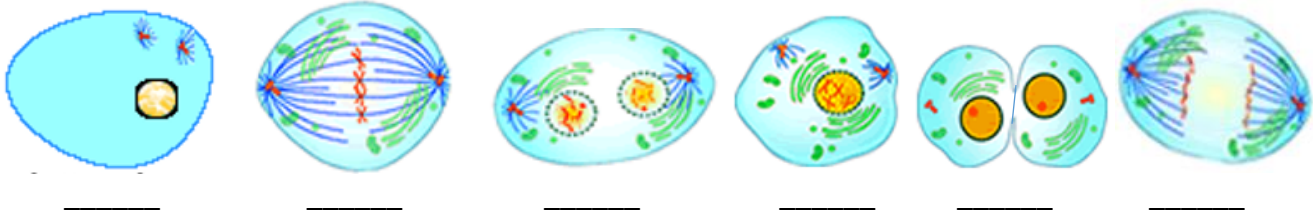


1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

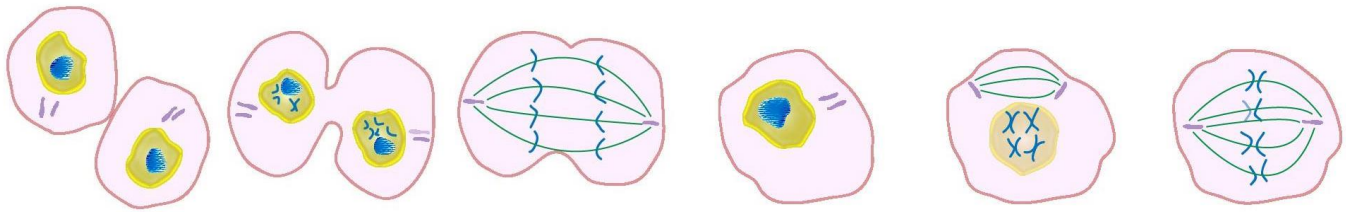
1. Place the letter of correct stage of the cell cycle below each diagram (I, P, M, A, T, C):



2. Number the following phases in order of occurrence:



3. What is the correct order of the stages above? _____, _____, _____, _____, _____, _____



A

B

C

D

E

F

4. What is the name of each phase above?

A _____

D _____

B _____

E _____

C _____

F _____

5. What is the correct order of the phase above? _____, _____, _____, _____, _____, _____