

Name: _____

IMMORTAL CELLS

Answer the questions below as you progress through the Immortal Cells lesson and slideshow.

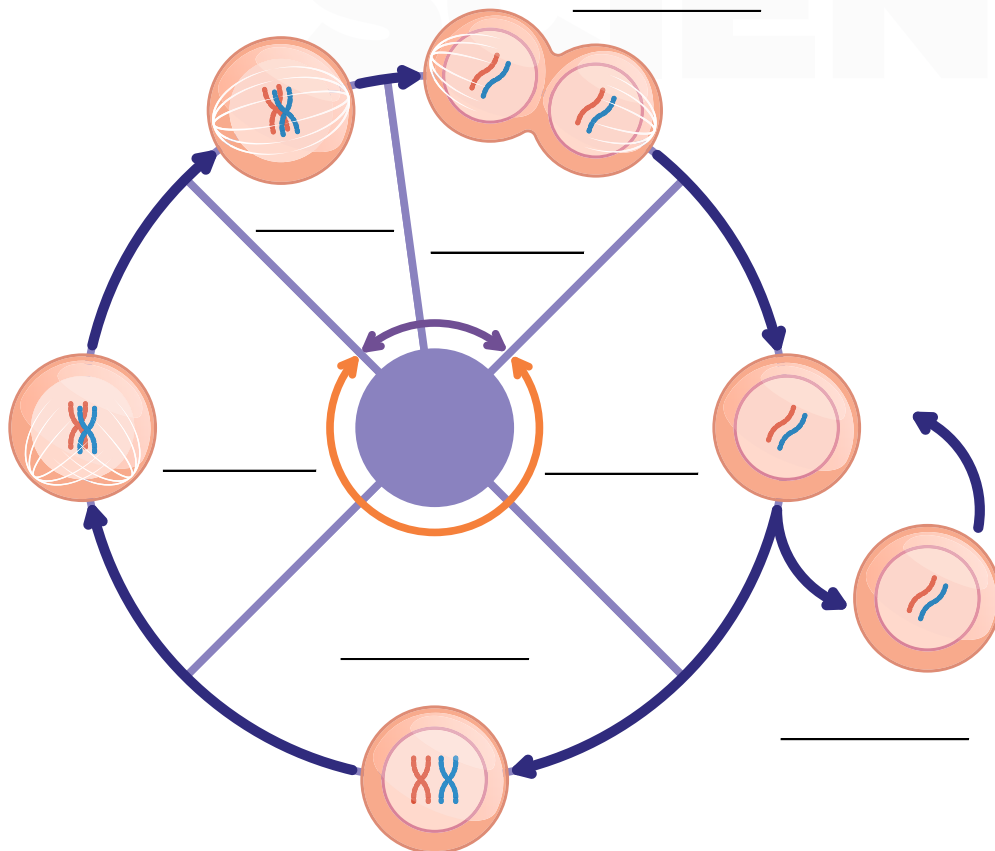
1. Watch the opening video and answer the following questions.

A. What does immortal mean?

B. What causes cells to die?

C. If animals can't be immortal, can cells be immortal?

2. Label the cell cycle below.



3. Define the following terms:

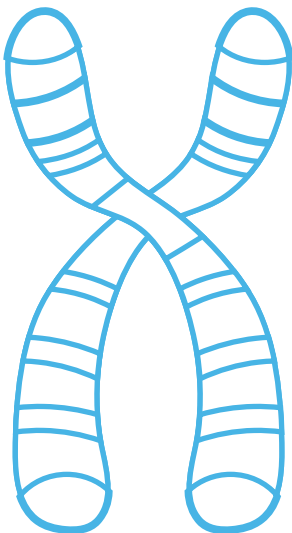
A. Pluripotent

B. Multipotent

4. Where would you find stem cells in your body?

5. After completing the differentiation activity, write your best answer to the following question: If the DNA in every cell is the same, how do cells become different?

6. Color in the telomere of the chromosome. What is the function of a telomere?



7. Watch the video and count the heart beats for each stage of cell development. Record the count for 20 seconds and multiply by 3 to get beats per minute.

Cell Age	Beats per 20 seconds	Beats per minute
9 Days		
12 Days		
40 Days		
53 Days		
68 Days		

What do you notice about the rate as the cells age?

8. Using what you have learned, defend the following claim using evidence.
Claim: Cells have the potential to be immortal.