

Name_____

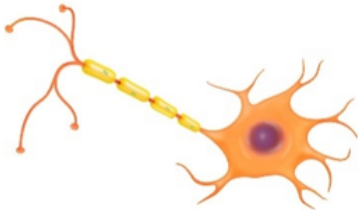
Date_____ Period_____

Cells, Organelles, and Cancer Quiz

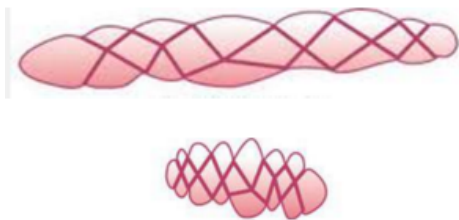
1. What type of cell is shown below? Hint = immunity. How might its structure support its function?



2. What type of cell is shown below? Hint = cell communication. How might its structure support its function?



3. What type of cell is shown below? Hint = the top figure is relaxed and the bottom is contracted. How might its structure support its function?

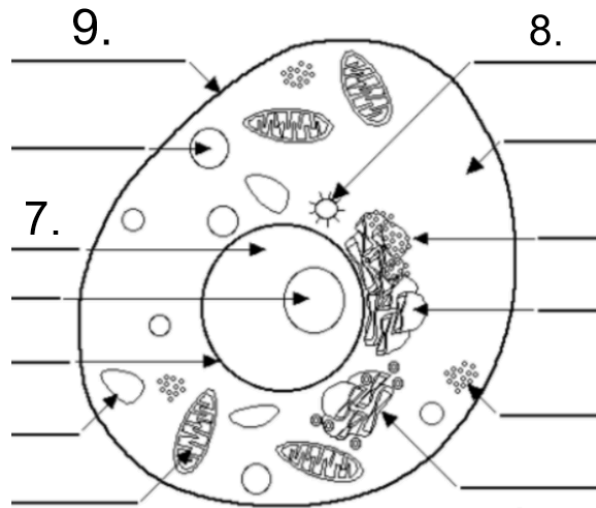


4. What are the six main characteristics of cancer? Name and briefly describe each.

5. Contrast normal cells with cancer cells. What features do cancer cells have that normal cells do not have?

6. How does eating to starve conditions like cancer work? Name some foods that would apply here.

Name the structures indicated below and name a **disease** associated with the malfunction of the organelle.



7. Hint = holds the DNA and its membrane protects the DNA.

8. Hint = aids in cell division.

9. Hint = controls what enters and exits the cell.

10. Differentiate between adult stem cells, pluripotent stem cells, and induced pluripotent stem cells.

11. Why do stem cells hold promise for more specific and individualized medical treatments?

12. Describe and contrast traditional cancer treatments with newer innovative treatments. Include the following: chemotherapy, radiation therapy, immunotherapy, and anti-angiogenic therapy (including eating to starve cancer).



Henrietta Lacks



Henrietta Lack's Descendents

13. Who was Henrietta Lacks and why did some of her descendents suing Thermo Fisher Scientific Incorporation?

Below is a word bank that might be helpful:

Not all terms below will be used, and there might be some terms that are not included.

smooth muscle cell	lysosome	hyperplasia	Golgi apparatus
nucleus	irregular shape	metastasis	mutation
dedifferentiation	skin cell	stem cells	cancer
mitochondria	pluripotent	apoptosis	melanocyte
intestine cell	ribosome	induced pluripotent stem cells	nerve cell
invasiveness	HELA Cells	tissue specific stem cells	sperm cell
chemotherapy	immunotherapy	rough ER	cell specialization

cell membrane

Centriole

Angiogenesis

nucleolus

radiation therapy

eating to starve cancer

Cystic Fibrosis

Cancer

Progeria

Pompe Disease

surgery

Cystic fibrosis

Blackfan Diamond Anemia

anti-angiogenic therapy