CELL CYCLE ANTICIPATION GUIDE

Read each statement and decide if it is True or False. Complete the left column before the reading by circling the T for True or the F for False. Complete the right column after finish the reading. Did any of your answers change?

BEFORE READING	STATEMENT	AFTER READING
T F	The last phase of mitosis is the telophase.	T F
T F	There are five kinds of cell division.	T F
T F	One of the main goals of a cell is to conquer.	T F
T F	The cell is the basic structure of living organisms and biology.	T F
T F	Mitosis occurs with simple organisms like bacteria.	T F
T F	Skin, blood, muscle cells multiply by mitosis.	T F
T F	Cells have a membrane on the outside.	T F
T F	Inside the cell membrane are the cytoplasm and nucleus.	T F
T F	Brain cells constantly divide and replace.	T F

DID YOU KNOW?

DNA is the acronym for deoxyribonucleic acid.

Cell Cycle

Name: _____

Answer the questions below. Then on the coloring page, color each numbered section with the corresponding color. If there is any space left over, color it your choice! Follow the directions provided to cite evidence from the reading.

Questions	Text Evidence	Answer A	Answer B
#1 What color blood cells carry oxygen through the body?	Find proof in the reading and UNDERLINE it in PURPLE	RED	Blue RED
#2 What term is used for the process of cells duplicating?	Find proof in the reading and CIRCLE it in GREEN	Chromosome PURPLE STRIPES	Mitosis BLUE STRIPES
#3 What is the first phase of mitosis called?	Find proof in the reading and BOX it in RED	Prophase YELLOW	Miphase ORANGE
#4 What do cells contain that is like a fingerprint?	Find proof in the reading and BOX it in YELLOW	RND RED	DNA ORANGE
#5 What is another term for cell cleavage?	Find proof in the reading and CIRCLE it in ORANGE	Cytokinesis BLUE	Kineticism BROWN
#6 What animal lays the largest known cell of all?	Find proof in the reading and UNDERLINE it in PURPLE	Ostrich ORANGE STRIPES	Platypus GREEN STRIPES

CELL CYCLE

The cell is the basic structure of living organisms and biology. The body survives, he[illegible]ows, and develops thanks to cells. Some living beings have a single c[illegible]hile [illegible]hers are much more complex, like a human being. An adult has [illegible]ximate[illegible]7.2 trillion cells.

O[illegible]th[illegible]ain goals of a cell is to organize. Various cell types have different purpose[illegible]annot function properly if they get too big, so they divide as needed[illegible]ings have multiple types of cells.

- Red bl[illegible]lls car[illegible]oxygen through the body.
- Sp[illegible]ith the heart.
- So[illegible]stay in one [illegible]attached to a muscle.
- Skin ce[illegible]constantl[illegible]ide [illegible]reproduce.
- Nerve [illegible]lls are[illegible]r kind [illegible]ell in the human body.

Groups of cells [illegible]e tiss[illegible]nd system[illegible].

Cells have [illegible]embran[illegible]on the [illegible]de. Imagine a plastic bag with miniature holes. The[illegible]holes allow t[illegible]s to transfer in and out of the bag. The bag contains fluid and[illegible]ell fragm[illegible].

Inside the cell membran[illegible]e the[illegible]sm and nucleus. Cytoplasm uses and transforms energy whil[illegible]he cell fu[illegible]ns. The nucleus has the genetic material and elemen[illegible]at cause division [illegible]eproduction.

Cells contain DNA, which is a cell's finger[illegible]. [illegible]a fingerprint, DNA is different from person to person.

Cells constantly make new c[illegible]th[illegible]row or repl[illegible]ead cells. Yet, some cells don't divide as often. Ther[illegible]e three kin[illegible]ce[illegible]ivision: binary fission, mitosis, and meiosis.

Binary fission occurs with simple orga[illegible]is li[illegible]acteria. DNA doubles, and the cell doubles its size. From here, the [illegible]licate D[illegible]strand[illegible]ift to opposite sides of the cell. Now the cell wall pi[illegible]es in the mid[illegible]o create two separate cells.

The cell cycle highlights how cells are constantly di[illegible]g.

1. GI phase - The cell cycle begins with phase GI. Here[illegible]s, grows and does its job. Some cells stop here and enter phase[illegible]. Th[illegible]don't[illegible] for a long time or even permanently.
2. S phase - Other cells duplicate DNA in the S phase in p[illegible]aration for cell division.