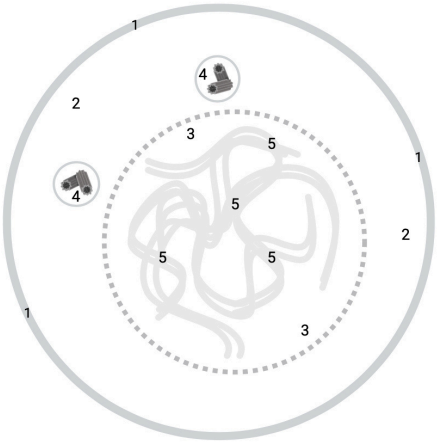
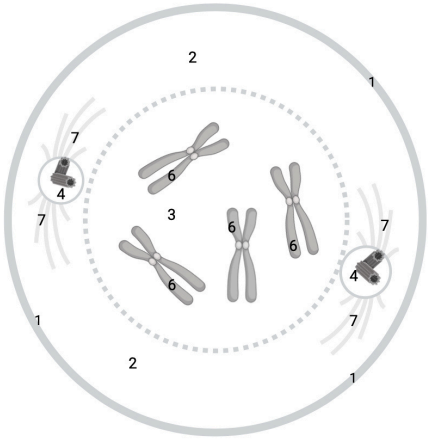
Name: _____

PROMISE

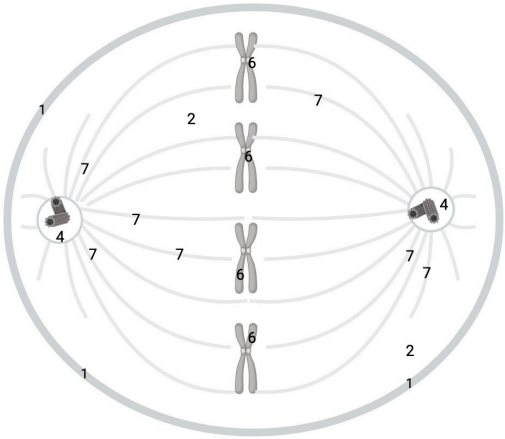
Cell Structures During Mitosis



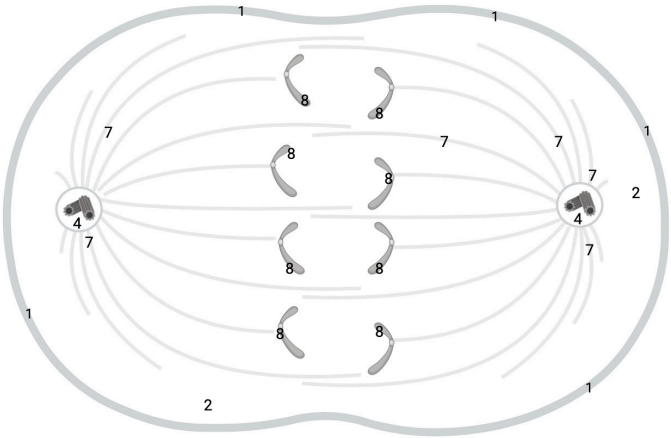
Interphase



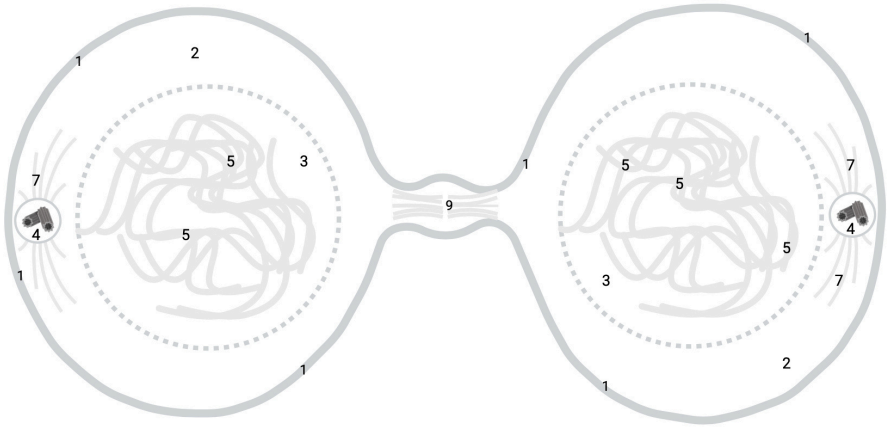
Prophase



Metaphase



Anaphase



Telophase

Color the following structures of a dividing cell by their number and write their names in the blanks. Record the color you use for each structure.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

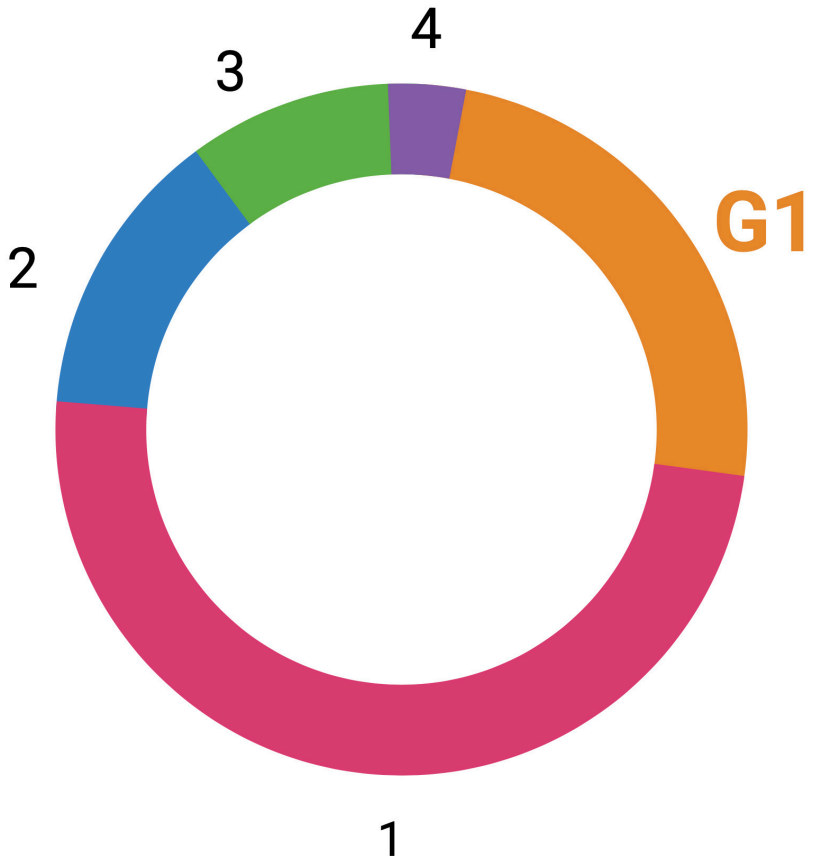
Word Bank

Chromosome Centriole Nuclear Envelope Spindle Cell Membrane
Cytoplasm Sister Chromatid Chromosome Chromatin

Name: _____

PROMISE
SANFORD RESEARCH

The Cell Cycle



Answer the following questions based on the image above.

1. Label the numbers 1 - 3 as the phases of the cell cycle that come after G1.
2. Circle the phase where DNA replicates.
3. What is happening in #4?
4. Draw an X on the phase(s) where the cell grows.

Name: _____

Match the phase of mitosis with its description.

a. Metaphase

b. Anaphase

c. Telophase

d. Prophase

e. Interphase

f. Cytokinesis

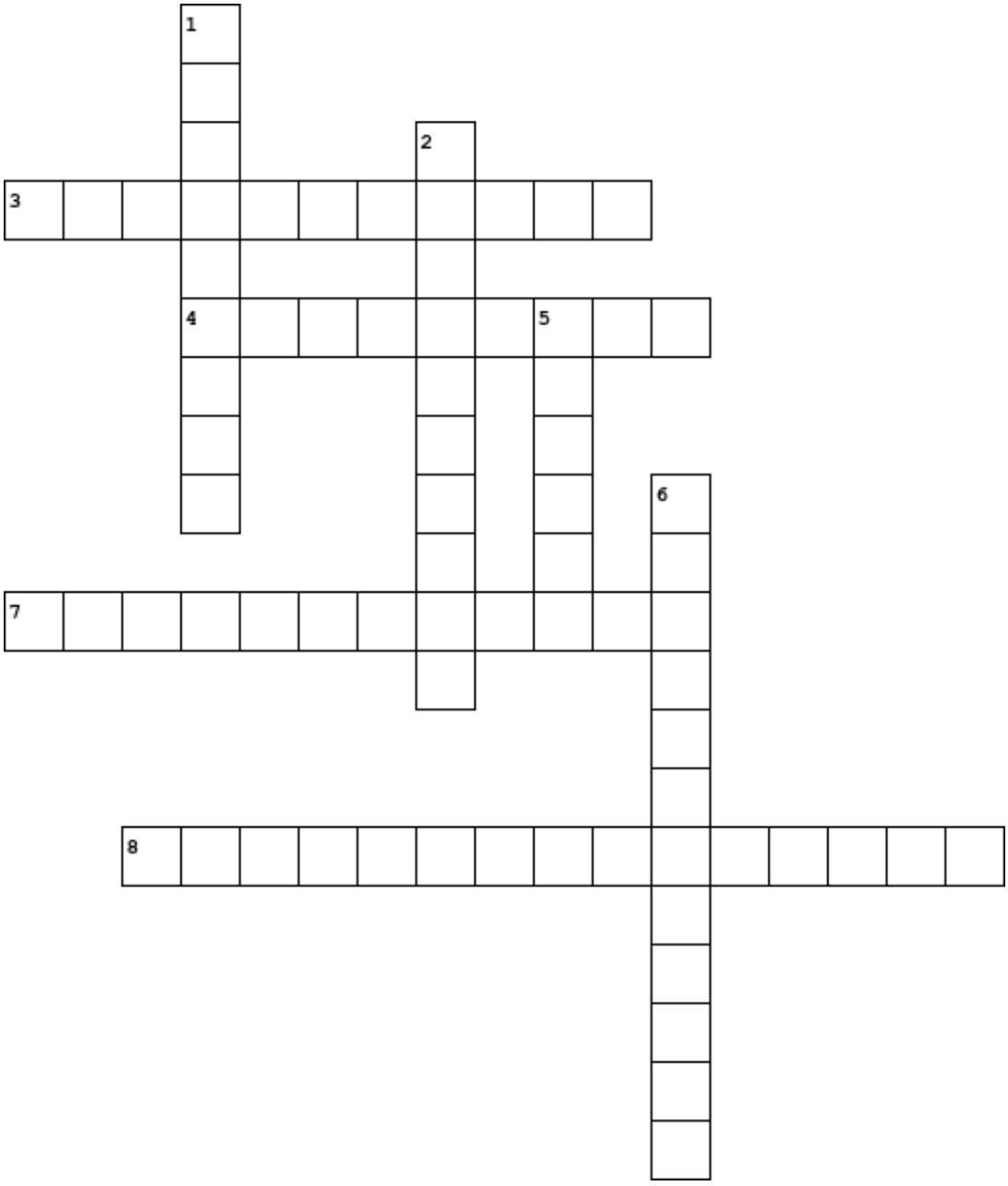
1. The chromatin in the nucleus forms into tightly packed chromosomes, and the nuclear envelope starts to break apart.
2. The phase where the cell isn't actively dividing; the "resting stage".
3. The division of the cytoplasm, resulting in two daughter cells.
4. The spindle pulls the separate sister chromatids to opposite sides of the cell.
5. Chromosomes line up in the center of the cell.
6. The chromatids unfold back into loose chromatin and two new nuclear envelopes reform.

1. __ 2. __ 3. __ 4. __ 5. __ 6. __

PROMISE
SANFORD RESEARCH

Name: _____

Cell Cycle Crossword



Across

3. Cytoplasm divides
4. Programmed Cell Death
7. The product of mitosis (you get two of them)
8. Membrane that encloses the nucleus

Down

1. One of two in a pair of condensed DNA
2. Region on chromosome where sister chromatids are glued together
5. Where you see a cell replicating its DNA
6. Mitosis

PROMISE

Name: _____

Mitosis Word Search

Look for the **words listed below.**

R R N B K J C P N G B K W P W O U S E C
D M E J S V A R H G T Z K D U H M N Q C
F C P A T E L O P H A S E H N M V O I G
O J L B L C F P J D C D V N Z A X N R B
A D Q V C I X H S V C R L E D N W F J C
E N W S I Q S A S H R Q X Q F G J I S Y
I C A D V E N S U R E Z M S A A W C C T
G F H P B Y F E P D C Y Y H I V E T I O
N V F Y H I I Y S I M V M S U S M I E P
L D Y J R A D X O G N Q Q P H M O O N L
C H R O M O S O M E K D Q X F J O T C A
N C L R W S L E J S W M L B T G J R I S
G E A M I F P G L X L K Y E H K S W C M
U Z S H Q D E O V V E J N X I L U M I Y
A A S W U E L O I R T N E C 1 O E D C S
G N I X U C B K I T P Y C Y F Y L E T T
E V C X R Z B A Z V S Y C T X L C D I E
K P S N I N T E R P H A S E Y R U R O R
Q W G R T G C L K Z M E M B R A N E N Y
X Y O S T N E H U O H O G R O R F W F U

Prophase
Cytoplasm
Spindle
Centriole

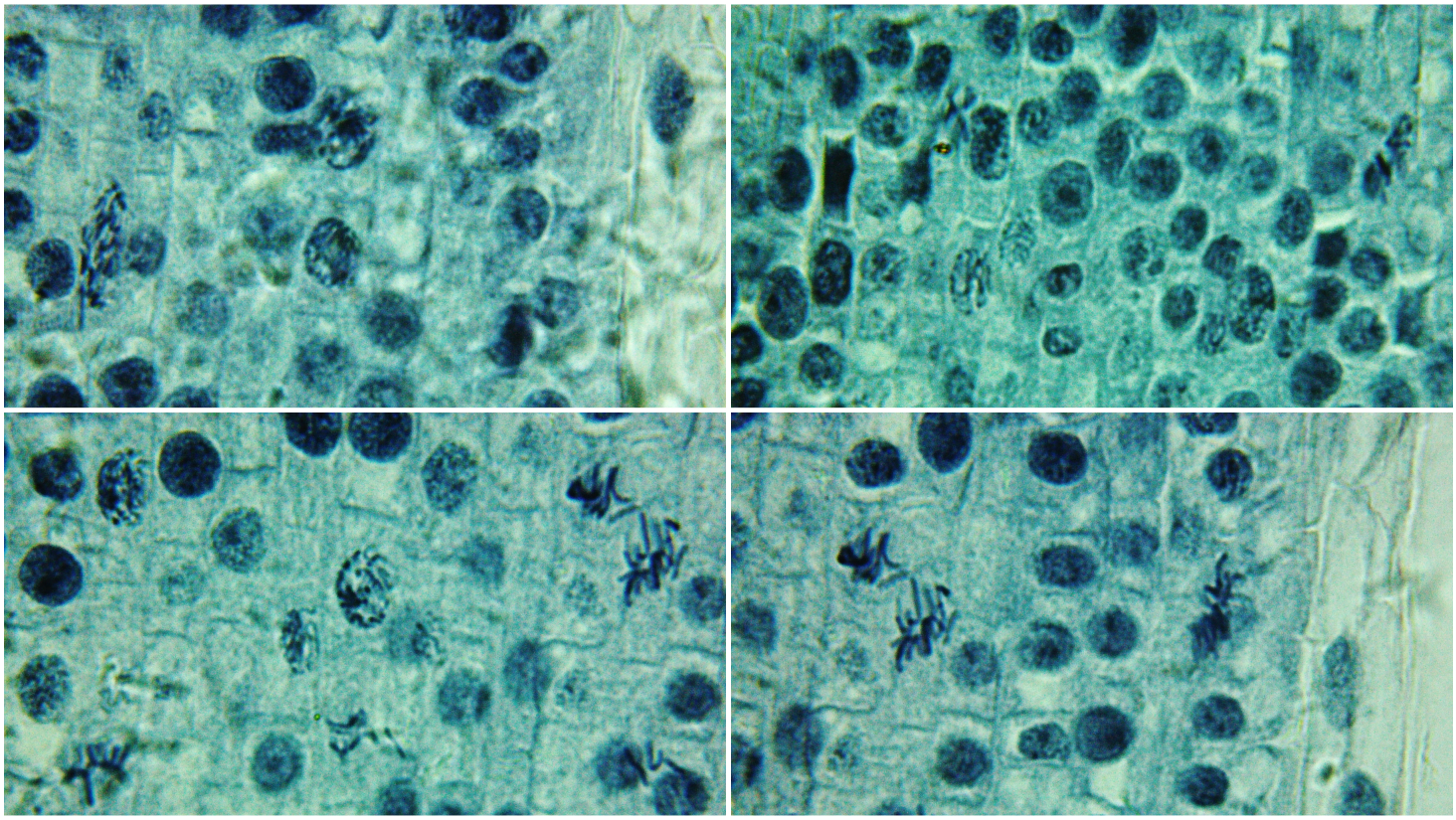
Telophase
Nucleus
Chromosome
Anaphase

Interphase
Membrane
Mitosis
DNA

PROMISE

Name: _____

Onion Root Activity



Above are images of an onion root under a microscope. Use these images to answer the following questions.

1. Draw a **circle** around a cell that's currently in **prophase**.
2. Draw a **square** around a cell that's currently in **metaphase**
3. Draw a **triangle** around a cell that's going through **anaphase**.
4. Draw a **heart** around a cell that's in **telophase**.

Why did you pick the cells that you did for each stage? Write your thoughts below.

_____

_____

_____

_____

PROMISE