

OREO CELL CYCLE

purpose: TO MODEL THE PHASES OF MITOSIS

materials:

- 6 OREOS (per group)
- 2 TABLESPOONS OF COLORED SPRINKLES (per group)
- TOOTHPICKS
- PAPER TOWEL
- CONSTRUCTION/PLAIN WHITE PAPER



procedure:

1. USING YOUR NOTES OR OTHER RESOURCES, PULL UP AN IMAGE OF THE FULL CELL CYCLE
2. USING THE IMAGE YOU FOUND OR YOUR NOTES, CREATE A REPRESENTATION FOR EACH STAGE OF THE CELL CYCLE
 1. CAREFULLY REMOVE THE TOP COOKIE FROM THE OREO BY TWISTING
 2. YOU WILL USE THE BOTTOM COOKIE WITH THE CREAM FOR YOUR REPRESENTATIONS



background info:

IF THE OREO IS REPRESENTING YOUR CELL – WHAT PART OF THE CELL IS THE CREAM OF THE OREO REPRESENTING?

3. YOU WILL CREATE STRUCTURES INSIDE THE CELL THAT PLAY A ROLE IN THE CELL CYCLE
4. ONCE YOU CREATED A REPRESENTATION OF ALL PARTS OF THE CELL CYCLE – LABEL THE DIFFERENT STAGES ON YOUR PAPER

summary:

FOR THE FOLLOWING STAGES OF THE CELL CYCLE, WRITE A SUMMARY AND DRAW A SKETCH OF WHAT IS OCCURRING.

INTERPHASE	Description:	Sketch:
PROPHASE	Description:	Sketch:

METAPHASE	Description:	Sketch:
ANAPHASE	Description:	Sketch:
TELOPHASE	Description:	Sketch:
CYTOKINESIS	Description:	Sketch:

analysis:

1. DURING WHICH PHASE DO THE SISTER CHROMATIDS MOVE TO THE OPPOSITE SIDES OF THE CELL?
2. WHAT PHASE DOES THE NUCLEAR MEMBRANE REAPPEAR AROUND NEW CHROMOSOME SET?
3. WHEN ARE THE CHROMOSOMES (DNA) COPIED?
4. WHAT STRUCTURES MAKE THE SPINDLE FIBERS?
5. WHAT IS CHROMATIN?
6. WHAT ARE SISTER CHROMATIDS AND WHEN ARE THEY FORMED?
7. WHAT ARE THE 4 STAGES OF MITOSIS?
8. WHY ARE THE CENTRIOLES IMPORTANT IN THE CELL CYCLE?
9. HOW DOES A CELL PREPARE TO DIVIDE?
10. WHEN DO NEW NUCLEI FORM AROUND THE CHROMATIN OF THE TWO NEW FORMING CELLS?