

Using Learning Cards to Study Mitosis
Biology I Version

Name _____

1. Take your packet of mitosis learning cards and arrange them in order from interphase to the results of telophase.

Place the correct lettered sequence of cards in the space below.

2. Place the proper letter(s) of the view that represents the following mitosis stages.

(a) Prophase _____

(b) Metaphase _____

(c) Anaphase _____

(d) Telophase _____

3. Which card(s) represent interphase? The letter(s) _____ represents interphase.
Which card(s) represent 2 new cells? The letter (s) _____ represents 2 new cells.

4. Identify the letter of the card and the proper name of the phase which the following occurs:

	<u>Card Letter</u>	<u>Phase Name</u>
(a) Where does the spindle first appear?	_____	_____
(b) When is the DNA material duplicated?	_____	_____
(c) When does cytokinesis end?	_____	_____
(d) When are centromeres split and chromosomes migrate to poles?	_____	_____
(e) When does the nuclear membrane totally disappear?	_____	_____
(f) Which phase does the cell spend most of its life span?	_____	_____
(g) When does the nucleolus disappear?	_____	_____
(h) When do chromosomes line up in the center of the cell?	_____	_____
(i) When does the nucleolus reappear?	_____	_____
(j) When do centrioles migrate to opposite sides of the cell?	_____	_____

	<u>Card Letter</u>	<u>Phase Name</u>
(k) When does the spindle disappear?	_____	_____
(l) When does chromatin material condense and coil into visible chromosomes?	_____	_____
(m) When does the nuclear membrane reappear?	_____	_____
(n) When is DNA in the chromatin form?	_____	_____
(o) When does the nucleolus reappear?	_____	_____

5. **NOW, ATTACH YOUR CARDS TOGETHER AND STAPLE IN THE PROPER ORDER. FLIP THROUGH THE STAGES. ANSWER THE FOLLOWING QUESTIONS.**

SHORT ANSWER QUESTIONS:

- How is this model (stapled together cards) like the real mitosis process?

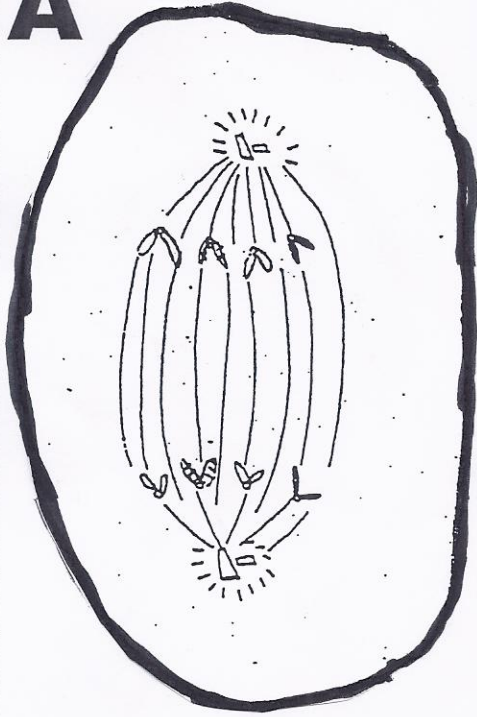
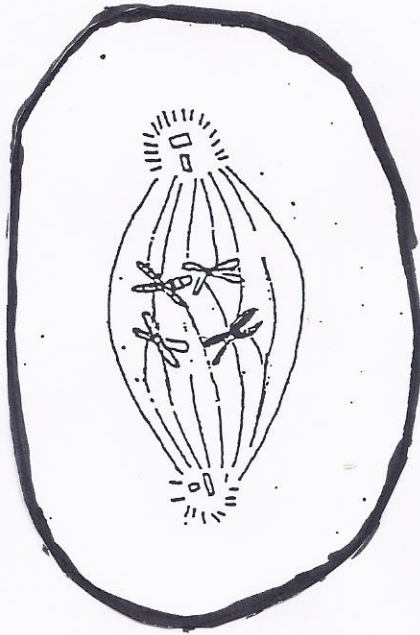
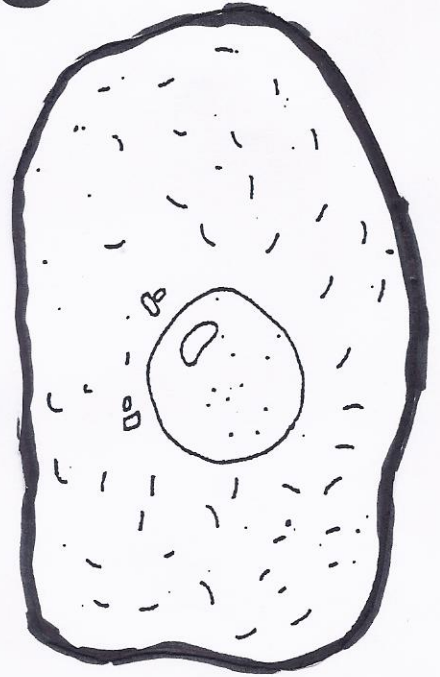
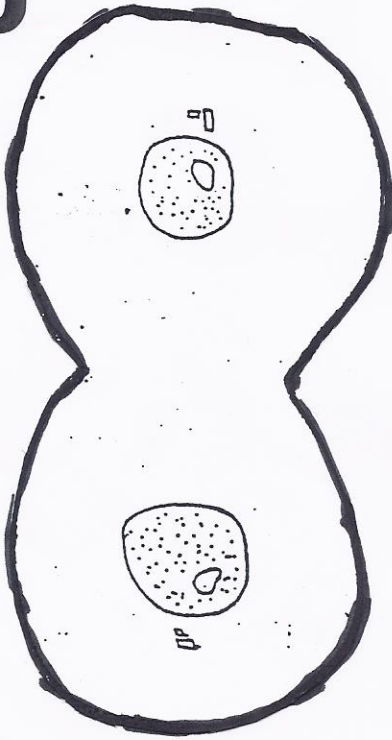
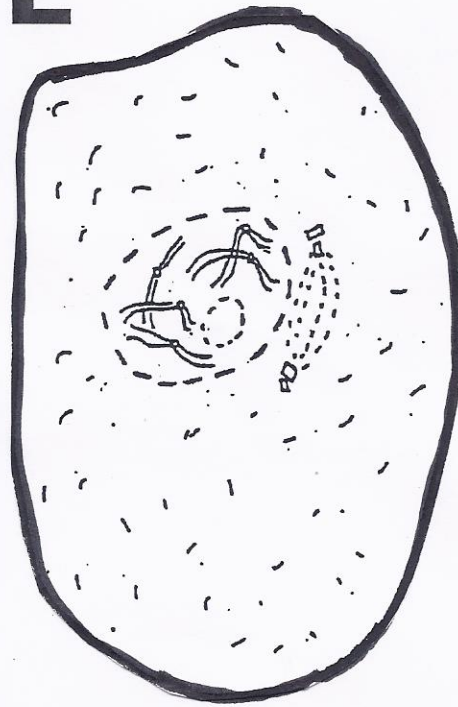
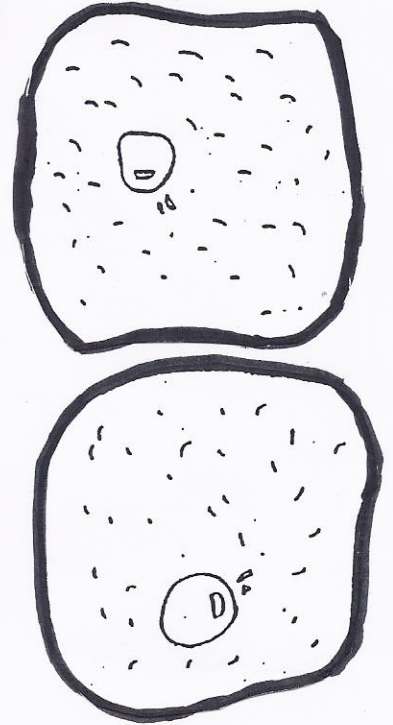
- How is this model (stapled together cards) different from the real mitosis process?

- Do these cards represent plant or animal mitosis? How do you know?

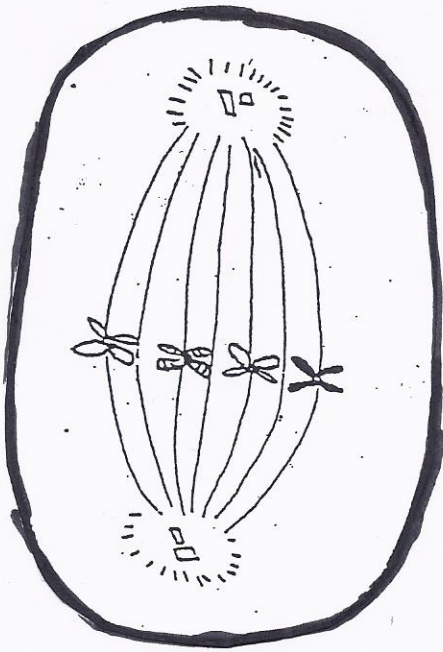
- Distinguish among chromosomes, chromatids, and chromatin.

- What is the result of mitosis?

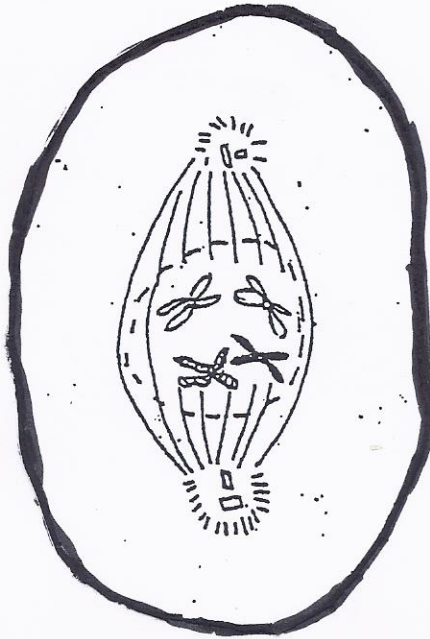
- A dog's body cell has 78 chromosomes. How many would be in each "new" cell after mitosis?

A**B****C****D****E****F**

G



H



I

J

K

L