

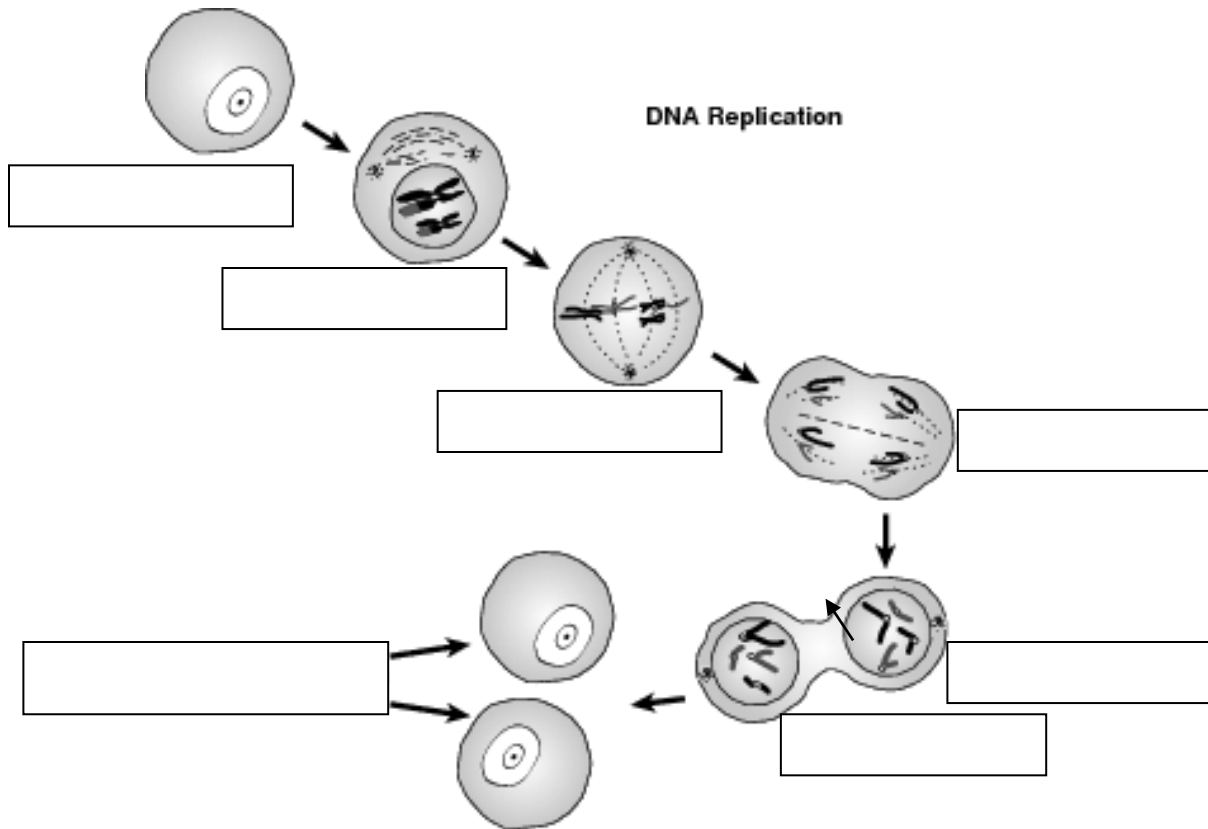
Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Worksheet 5-1 Cell Division & Cell Cycle (Nelson p.32-33; p.36-39)

1) Label the diagram below.

**anaphase**      **cytokinesis**      **daughter cells**      **interphase**      **metaphase**  
**prophase**      **telophase**



2) The **three stages** of the **cell cycle** are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

3) Describe 2 events that happen during **metaphase**.

- a) \_\_\_\_\_
- b) \_\_\_\_\_

4) A skin cell in a cat has **38 chromosomes**. It divides and produces two daughter cells. Each daughter cell will have \_\_\_\_\_ (how many?) chromosomes.

5) A human skin cell has 46 chromosomes just before it starts mitosis. A cell division will produce \_\_\_\_\_ (how many?) cells; each with \_\_\_\_\_ (how many?) chromosomes.

6) Fill in the blanks.

**anaphase**      **cytokinesis**      **interphase**      **metaphase**      **mitosis**  
**prophase**      **telophase**

- (a) \_\_\_\_\_ The longest stage in the cell cycle.
- (b) \_\_\_\_\_ The cytoplasm and organelles of the cell are being divided.
- (c) \_\_\_\_\_ The chromosomes line up across the centre of the cell.
- (d) \_\_\_\_\_ A nuclear membrane forms around chromosomes.
- (e) \_\_\_\_\_ The chromosomes are moving towards the opposite sides of the cell.
- (f) \_\_\_\_\_ Chromosomes are duplicated.
- (g) \_\_\_\_\_ The chromosomes thicken and the nuclear membrane starts to dissolve.
- (h) \_\_\_\_\_ The nuclear material is divided into two equal parts.

7) List **three reasons** for **cell division**.

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

**Matching:** Match the phases of mitosis to the picture.

**Prophase**

**Telophase**

**Metaphase**

**Anaphase**

