Name: Date: Score: / 8

Cell Division: Learn and Practice

How one cell becomes two through mitosis

Read each question. Circle the best answer.

💡 Mitosis

- Cells divide to help living things grow and repair damage.
- Before dividing, a cell copies its DNA.
- Mitosis makes two new cells with the same DNA as the parent cell.
- 1 skin cell: mitosis: 2 identical cells

1 What must a cell copy before it divides?

A. Its DNA B. Its cell wall C. Its vacuole D. Its food

2 🧬 What are the tightly coiled strands of DNA that become visible when a cell divides?

A. Ribosomes B. Cilia C. Chromosomes D. Vacuoles

3 What is the final step called, when the cytoplasm splits to form two separate cells?

A. Pollination B. Photosynthesis C. Cytokinesis D. Respiration

4 Human body cells have 46 chromosomes. How many does each new cell from mitosis have?

A. 12 B. 92 C. 23 D. 46

5 How many new cells form when one cell divides by mitosis?

A. 4 B. 10 C. 2 D. 1

6 🩹 A cut on your knee heals over a week. Which process makes the new skin cells?

A. Digestion B. Mitosis C. Evaporation D. Photosynthesis

7 What is a main reason your body makes new cells?

A. To grow and repair damage B. To change eye color C. To make bones softer D. To store more water

8 How does the DNA in the new cells compare with the parent cell?

A. It is mixed with another cell B. It is all new C. It is half as much D. It is the same

✏️ Explain it! Write two facts you learned about cell division.

ANSWER KEY

Cell Division: Learn and Practice (answers)

How one cell becomes two through mitosis

Read each question. Circle the best answer.

1 What must a cell copy before it divides?

A. Its DNA B. Its cell wall C. Its vacuole D. Its food

DNA holds all the instructions, so the cell copies it first to give each new cell a full set.

2 🧬 What are the tightly coiled strands of DNA that become visible when a cell divides?

A. Ribosomes B. Cilia **C. Chromosomes** D. Vacuoles

Before dividing, DNA coils up into chromosomes, which are easier to sort and move.

3 What is the final step called, when the cytoplasm splits to form two separate cells?

A. Pollination B. Photosynthesis **C. Cytokinesis** D. Respiration

In cytokinesis the cytoplasm divides in two, so two separate cells are formed.

4 Human body cells have 46 chromosomes. How many does each new cell from mitosis have?

A. 12 B. 92 C. 23 **D. 46**

Mitosis makes exact copies, so each new body cell keeps all 46 chromosomes.

5 How many new cells form when one cell divides by mitosis?

A. 4 B. 10 **C. 2** D. 1

Mitosis splits one cell into two daughter cells. One becomes two!

6 🩹 A cut on your knee heals over a week. Which process makes the new skin cells?

A. Digestion **B. Mitosis** C. Evaporation D. Photosynthesis

Skin cells near the cut divide by mitosis to fill the gap with fresh cells.

7 What is a main reason your body makes new cells?

A. To grow and repair damage B. To change eye color C. To make bones softer D. To store more water

New cells let you grow bigger and replace cells that are worn out or damaged.

8 How does the DNA in the new cells compare with the parent cell?

A. It is mixed with another cell B. It is all new C. It is half as much **D. It is the same**

The cell copies its DNA before splitting, so each new cell gets an exact copy.