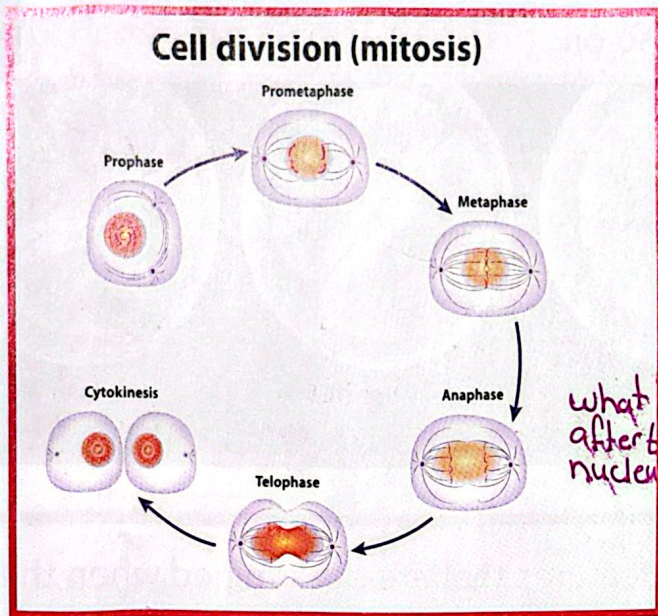


How Do Cells Divide?

mitosis
meiosis

There are two ways that cells can divide: meiosis or mitosis.



↓ what is mitosis?

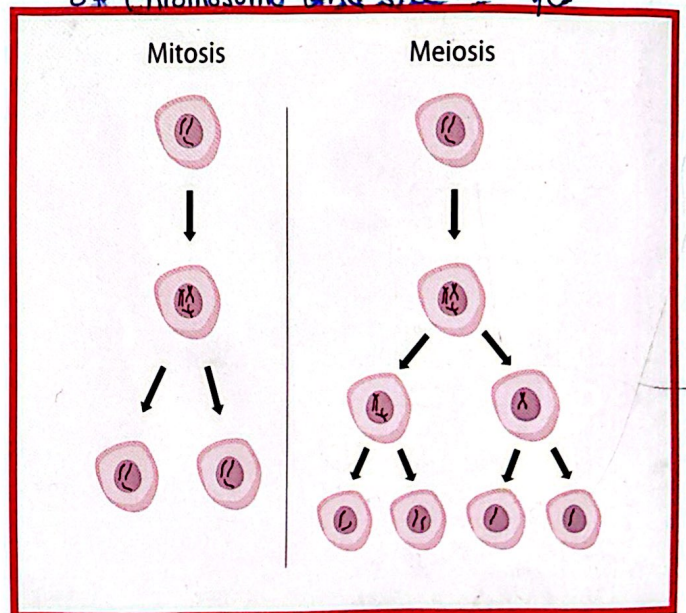
Mitosis occurs when single cells split into two cells. (The nucleus of the cell is the first to divide.) There are five steps in mitosis that occur within the nucleus. *How many steps are there in mitosis?*

There is another step that occurs, which isn't a part of mitosis. It is when the cytoplasm divides into two cells. *what happened after the nucleus divide?* These new cells grow to the same size as the original and will have the same amount of chromosomes.

Do the new cells have the same number of chromosome and size? Yes

Sex cells are formed through meiosis. Body cells have twice as many cells as sperm and egg cells. The cells join during sexual reproduction to form a new cell.

When the two cells become joined, the new cell will have a complete set of chromosomes.



Think about it!

Q1:- 46 chromosomes
How many chromosomes do humans have?
Research it! How many chromosomes do sex cells have?

Q2:- 23 chromosomes



* How is mitosis different from meiosis?

	Mitosis	Meiosis.
Number of cell produce.	two identical Cells	four cells.
Number of Chromosomes	the daughter cells same have the same amount of chromosomes	the daughter cells have a half number of Chromosomes.



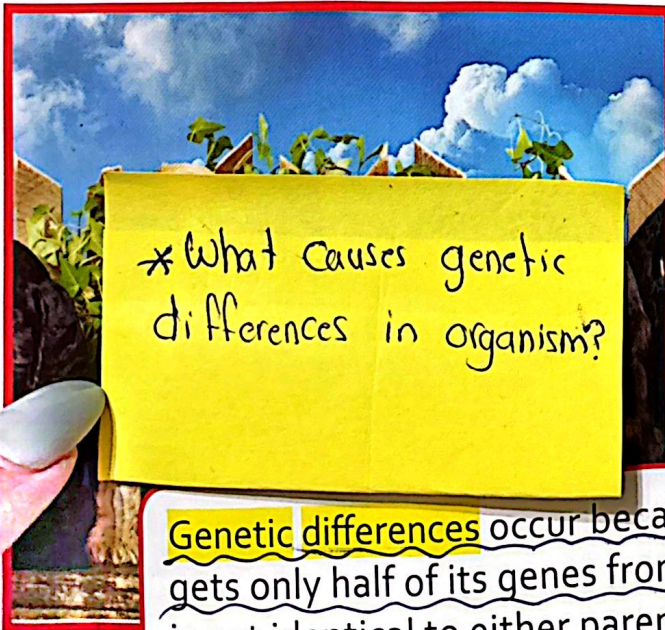
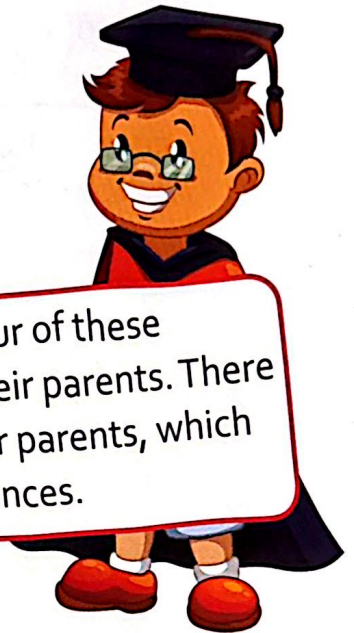
What Are Traits?

Characteristics

A combination of traits that we inherit from our parents determines the way we look. There are many traits that include skin color, eye color, height, the shape of our faces, hair color, and so much more. Animals can also inherit traits.



The softness and color of the fur of these kittens were inherited from their parents. There are genetic differences to their parents, which is why the kittens have differences.



*What causes genetic differences in organism?

Genetic differences occur because of meiosis. An organism gets only half of its genes from each parent. (The organism is not identical to either parent.) Every offspring receives a different set of genes, unless they are identical twins.



Fast Fact

The ability to roll your tongue is an inherited trait!

