

# Interesting facts about genetics

### Lesson objectives

- ✓ conduct a survey among classmates
- ✓ create a graph based on the information from classmates
- ✓ give definitions to the following terms: genetics, genes, chromosomes, DNA



# WHAT I DID ON MY SUMMER VACATION

- **✓**things I did
- things I ate
- things I saw
- things I accomplished
- **✓** things I should have done

# What is genetics?

Genetics is the study of genes and heredity. It studies how living organisms, including people, inherit traits from their parents. Genetics is generally considered part of the science of biology. Scientists who study genetics are called geneticists.

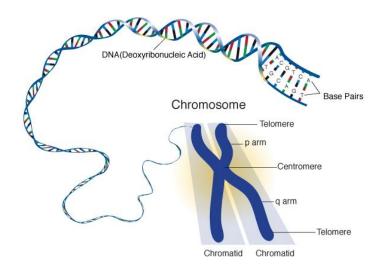
## What are genes?

Genes are the basic units of heredity. They consist of DNA and are part of a larger structure called the chromosome. Genes carry information that determine what characteristics are inherited from an organism's parents. They determine traits such as the color of your hair, how tall you are, and the color of your eyes.



#### What are chromosomes?

<u>Chromosomes</u> are tiny structures inside cells made from DNA and protein. The information inside chromosomes acts like a recipe that tells cells how to function. Humans have 23 pairs of chromosomes for a total of 46 chromosomes in each cell. Other plants and animals have different numbers of chromosomes. For example, a garden pea has 14 chromosomes and an elephant has 56.



#### What is DNA?

The actual instructions inside the chromosome is stored in a long molecule called <u>DNA</u>. DNA stands for deoxyribonucleic acid.

