## Gregor Mendel

The Father of Genetics!
He studied the pea
plants to learn more
about genes (No NOT
the jeans you wear).

# Punnett Square

This maps out genetic possibilities. Hint: it looks like four square!

#### double helix

DNA model of a DNA strand

characteristics

A feature that helps to identify, tell apart, or describe a trait.

# trait

A special feature that describes more about something. For example: This is a synonym for the words: characteristic, property, or attribute.

# hybrid

An organism produced by the crossing of parents that have different forms of the same trait. For example: A capital R and a lower case r would be Rr. Another example would be Bb.

# spindle fibers

These are the strands that pull apart the chromosomes at the center when they are dividing inside the nucleus to form a second cell.

#### learned behavior

A type of behavior that has to be taught to you. For example: riding a bike, walking, eating, etc.

chromosomes

A thread-like structure inside a living cell, made mainly of DNA and proteins.

#### recessive gene

When one version of the gene is less powerful than the dominant trait.

#### dominant gene

When one version of gene is stronger than the other. This trait is the visible trait in the offspring.

#### inherited trait

Traits that are passed on from parents to their offspring. For example: eye color, hair color, shape of your nose, etc.

## genetics

# The study of heredity.

## heredity

This is the passing on of traits from parents to their offspring.

homozygous

An organism with two alleles for a trait that are exactly the same. For example: TT or BB

heterozygous

An organism with two different alleles for a trait. For example: Tt or Bb

crossbreeding

Producing offspring by mating individuals from two distinct breeds or varieties of the same species.

# offspring

# a child or children

# instinct

An inherited behavior. For example: crying, breathing, etc.

adaptations

A characteristic that helps an organism survive in an environment.

# DNA

A chemical substance that carries genetic information in the vast majority of living things.

## Genes

A unit of inheritance for passing on one feature; characteristic or trait.