

Presents...

## Lesson 1: Genetic Basics for Kids

Introduction:

1. What is the study of genetics?
2. What are genes and chromosomes?
3. What are genetically modified organisms (GMOs)?

<https://kids.britannica.com/kids/article/genetics/353170>

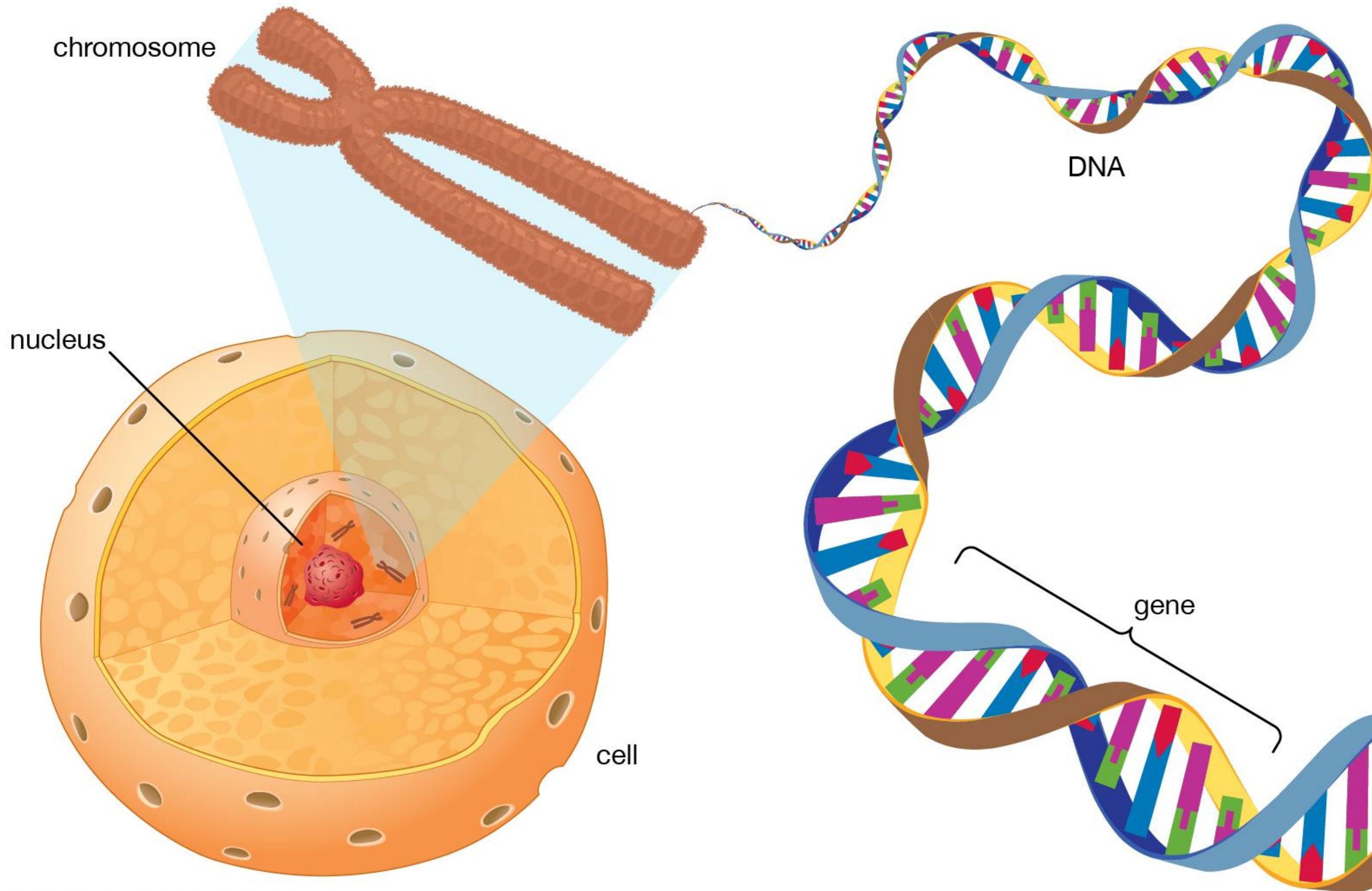


# 1. What is the study of genetics?

- ✓ **Genetics** is the study of heredity, or how different features are passed from parents to their offspring or kids.
- ✓ The offspring may have look like their parents but can vary also.
- ✓ Genetics explains how the offspring get some of the features of the parents and not others.

# 2. What are genes and chromosomes?

- \* **Genes** are the basic units of heredity.
- \* They live inside cells that make up living things.
- \* They carry information that will make up the individual or plant.
- \* Thread-like structures called **chromosomes** carry the genes.
- \* Each chromosome is made of a substance called **DNA** (deoxyribonucleic acid).
- \* *The genes are short sections of DNA.*



### 3. What are genetically modified organisms (GMOs)?

- \* **Organisms** are plants, animals, bacteria or viruses.
- \* **GMOs** are organisms that have had their **DNA** changing using scientific tools.
- \* Scientists take the trait of one organism and inject it into the DNA of another organism's DNA to change it.
- \* GMOs are mostly used to change foods like fruits and vegetables (crops).  
The crops are given traits from other organisms that are not harmed from pesticides.
- \* **Pesticides** are chemicals that kill weeds, insects or fungi.
- \* When the GMO plant is sprayed with pesticides, only the weeds or the insects die.



## Some GMO Foods & Crops:

- Soy
- Canola
- Corn
- Papaya
- Sugar beets
- Zucchini
- Yellow squash
- Cotton



# Lesson 2:

## Healthy Soil = Healthy Kids



For more on Genes and DNA visit <https://www.slideshare.net/heatherelira/genetics-for-kids-70100804>