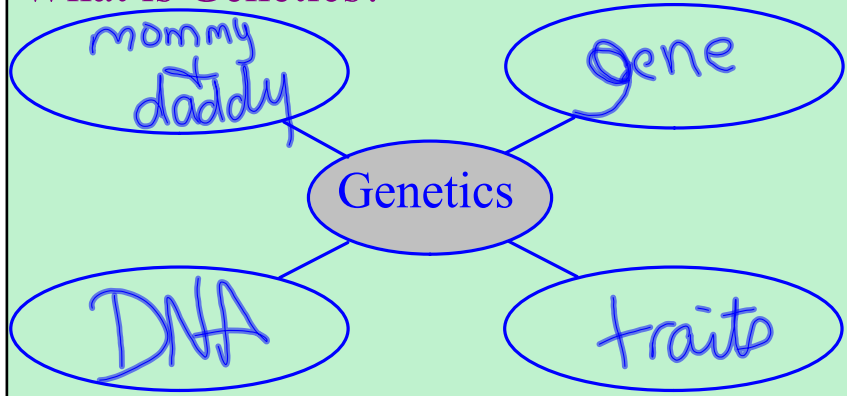


What is Genetics?



Click for the Correct Answer

Brainstorm

Genetics is both the branch of biology that studies heredity and the interaction of genes.

things you inherit

Defintion

Which are genetics diseases?

Circle the genetic diseases.

Adrenoleukodystrophy (ALD)

AIDS

Albanism

Botulism

Cancer

Cri-du-Chat

Down syndrome

Encaphalitis

Hemophilia

Huntington disease

Influenza

Leprosy

Sickle cell anemia

Small Pox

Tay-Sachs

Turner Syndrome

Genetic Diseases

New cells are made by cell division.

The adult human body makes

1,000,000,000,000

cells every day.

100

100,000

1,000,000

Which answer is correct?

b m n

Cell Division

Cells are undergoing cell division.

For example: Cells divide when cuts are healing or when an animal is growing.



Would there now be:

a. Bigger Cells

b. More Cells

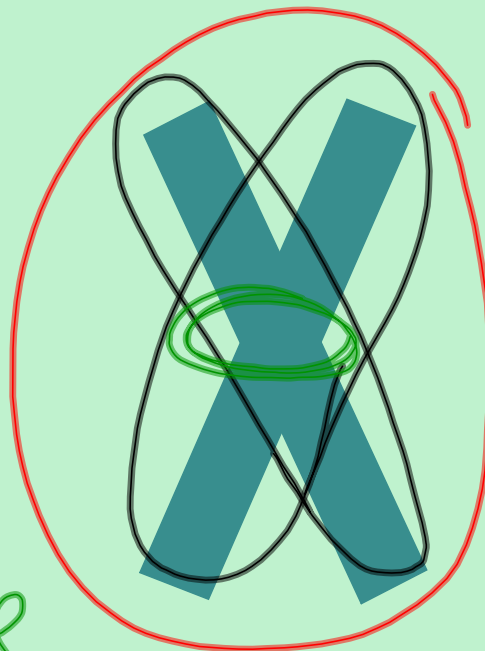
Cell Division 2

Chromatids

Chromosome

Centromere

Centrosome



Chromosome Picture

Match the correct term to its definition.

Chromatids

Chromosome

Centromere

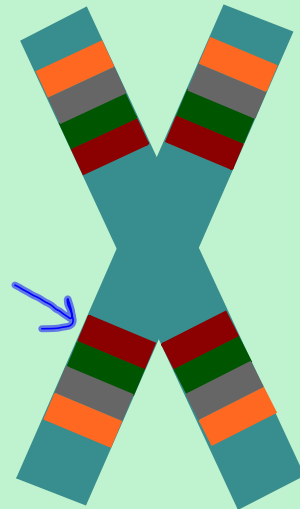
region joining  
two chromatids

one pair of a DNA  
strands of DNA to  
make a chromosome

structure of made  
DNA on which genes  
are located.

Defination 2

A *gene* is a  
section of a  
chromosome that  
codes for a  
protein or RNA  
molecule



Draw an arrow to point to a gene.

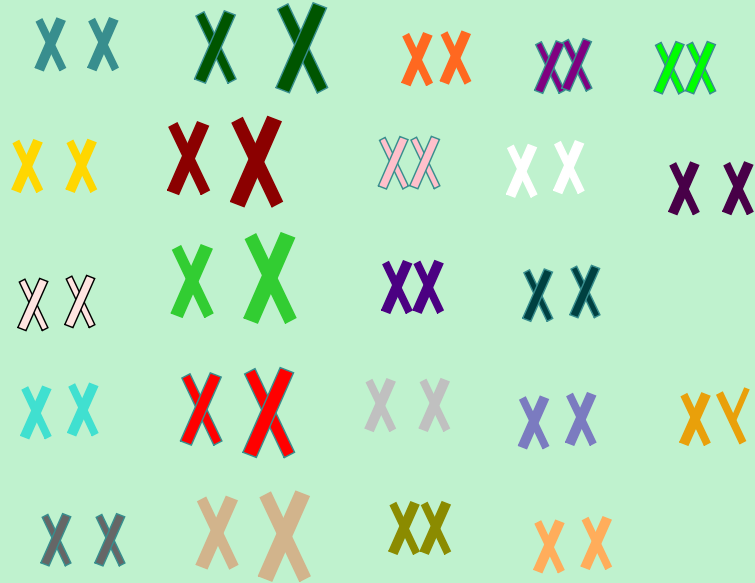
Gene

How many chromosomes does a human have?

Count the chromosomes

46

Number of Chromosomes



Number of Chromosomes

What do you notice about these two chromosomes?

1. Same
2. have genes
3. alike



Homologous Chromosomes

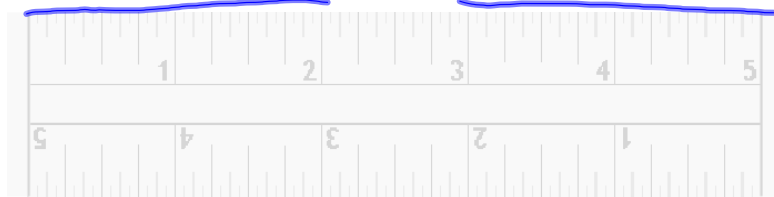
## Homologous Chromosomes

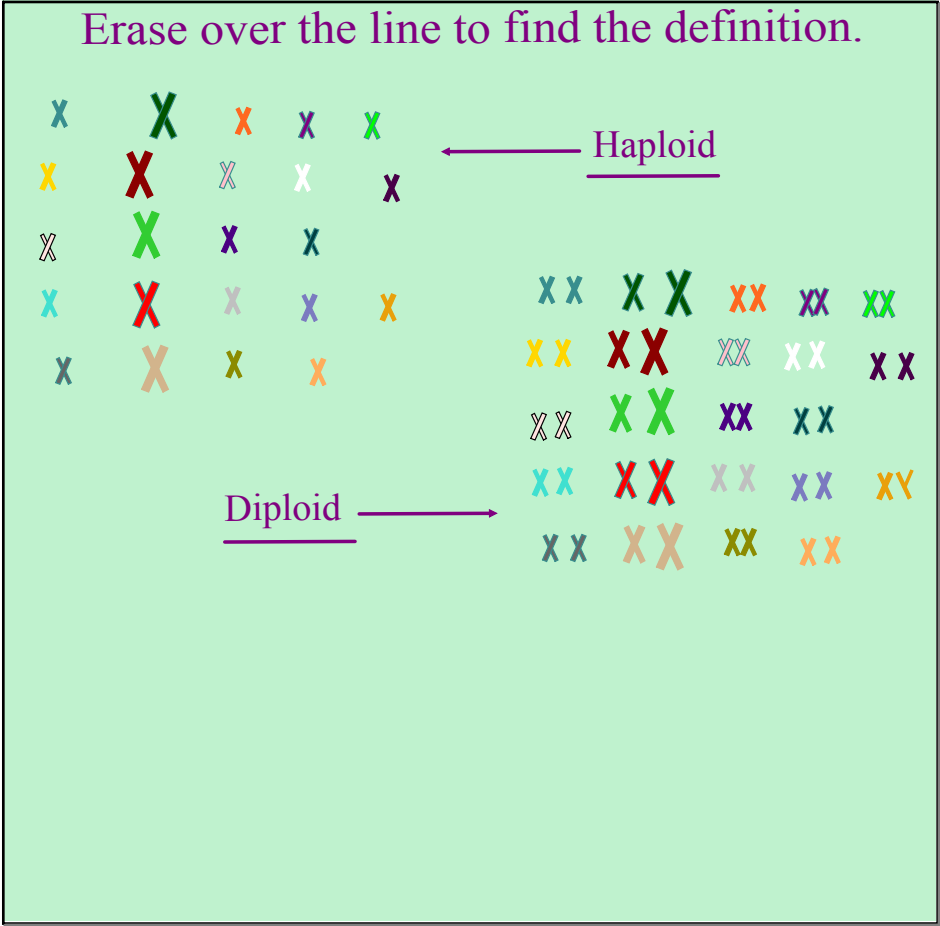
Chromosomes  
that are similar in:

1. Size
2. Shape
3. genetic content

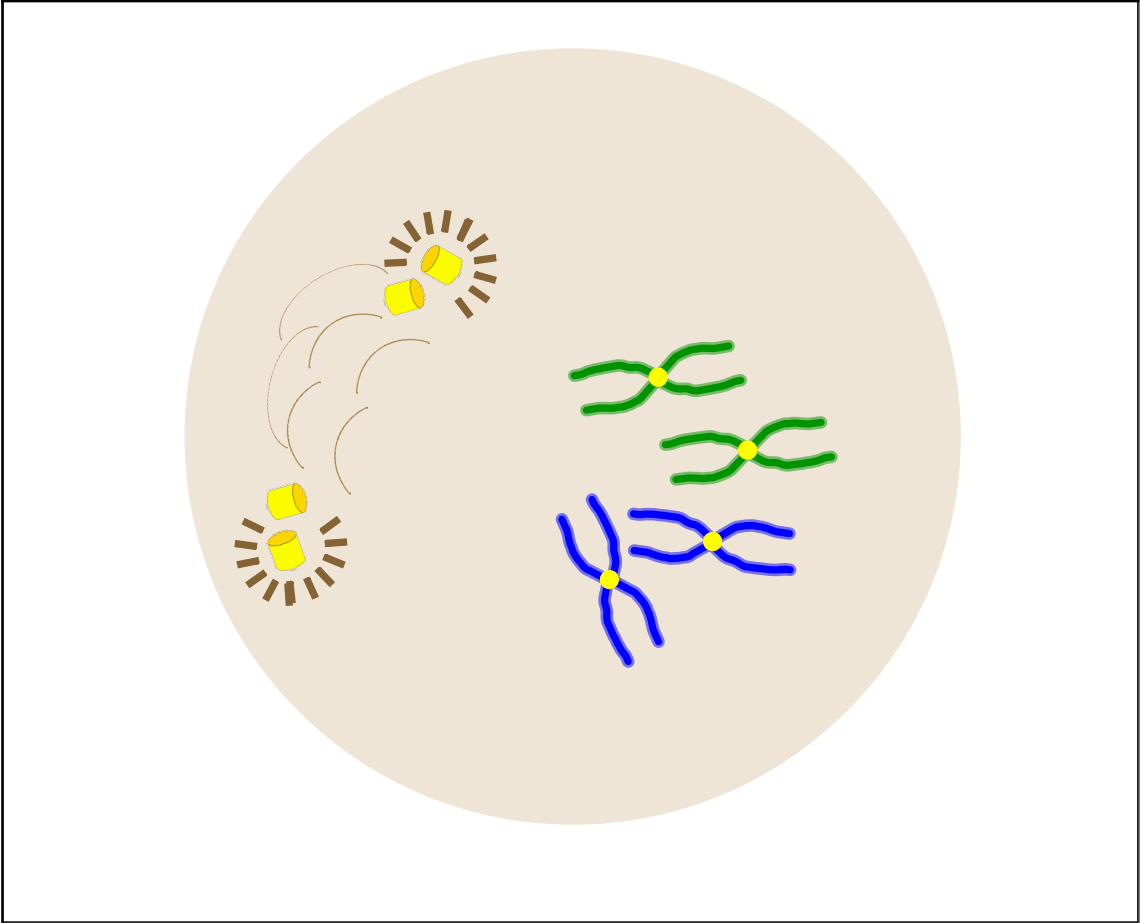


Homologous Chromosomes

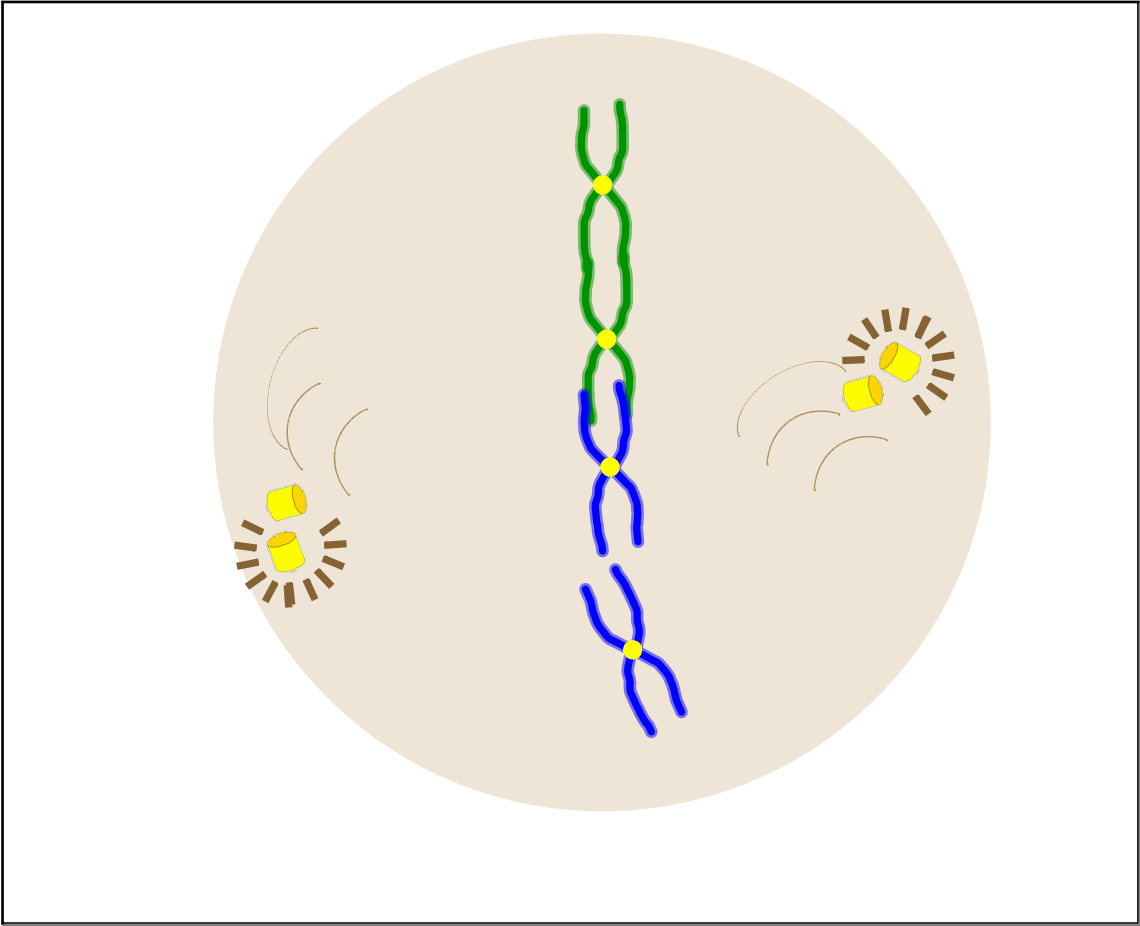




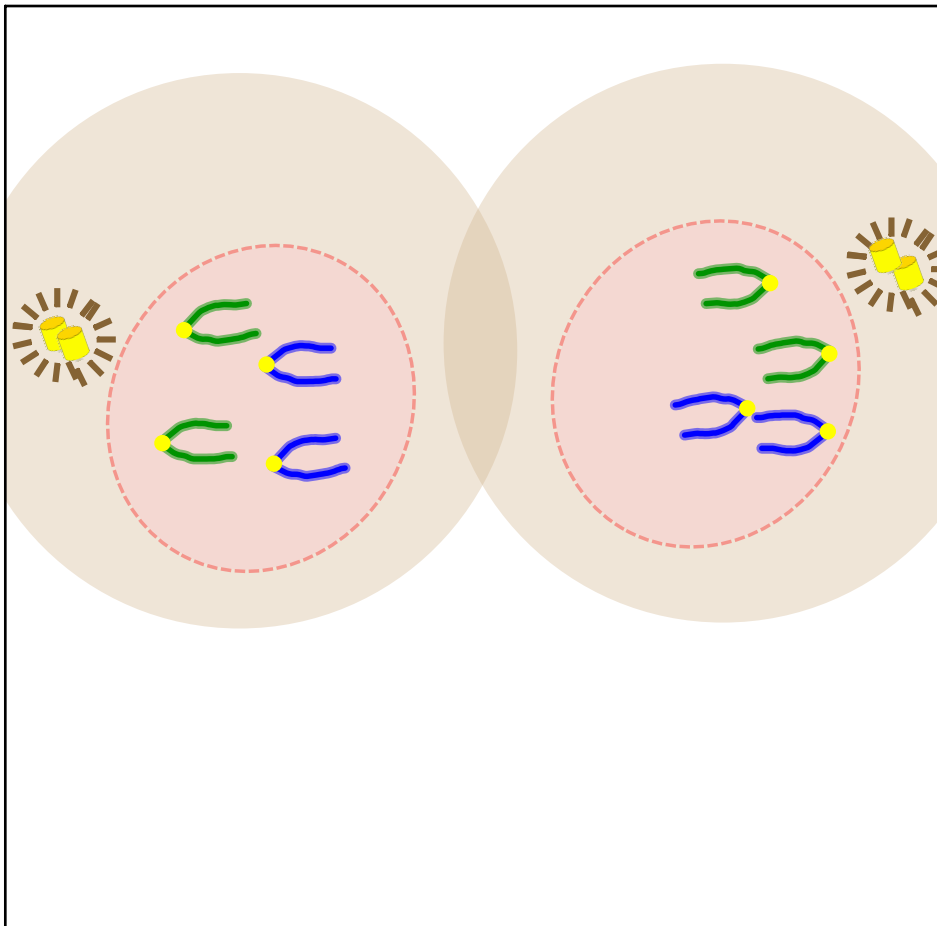
Haploid vs. Diploid



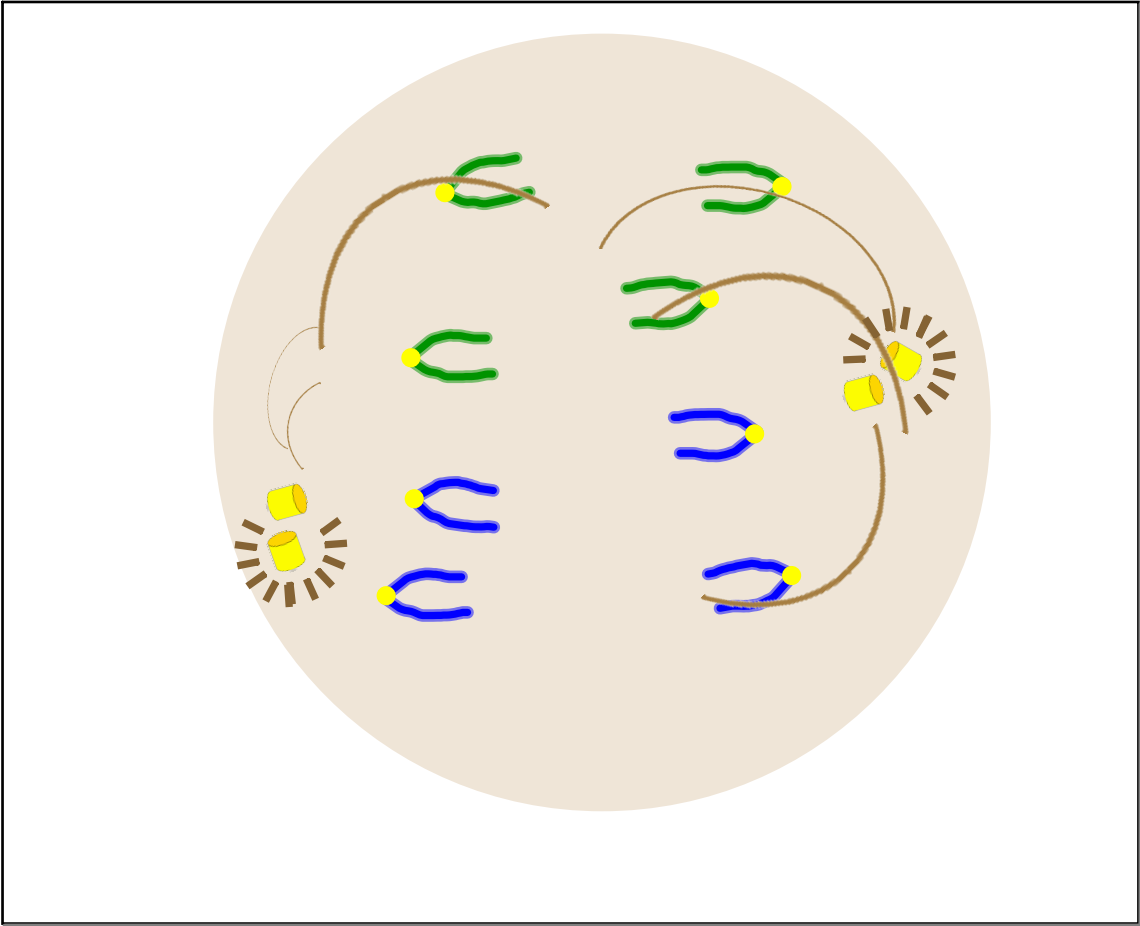
Dec 1-1:37 PM



Dec 1-1:37 PM



Telophase



Dec 1-1:37 PM

Mitosis 10pts

Prophase	4pts - order
Metaphase	4pts - labels
Anaphase	1pt - name on back
Telophase	1pt - labels readable

Dec 1-8:41 AM