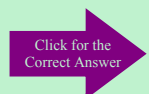
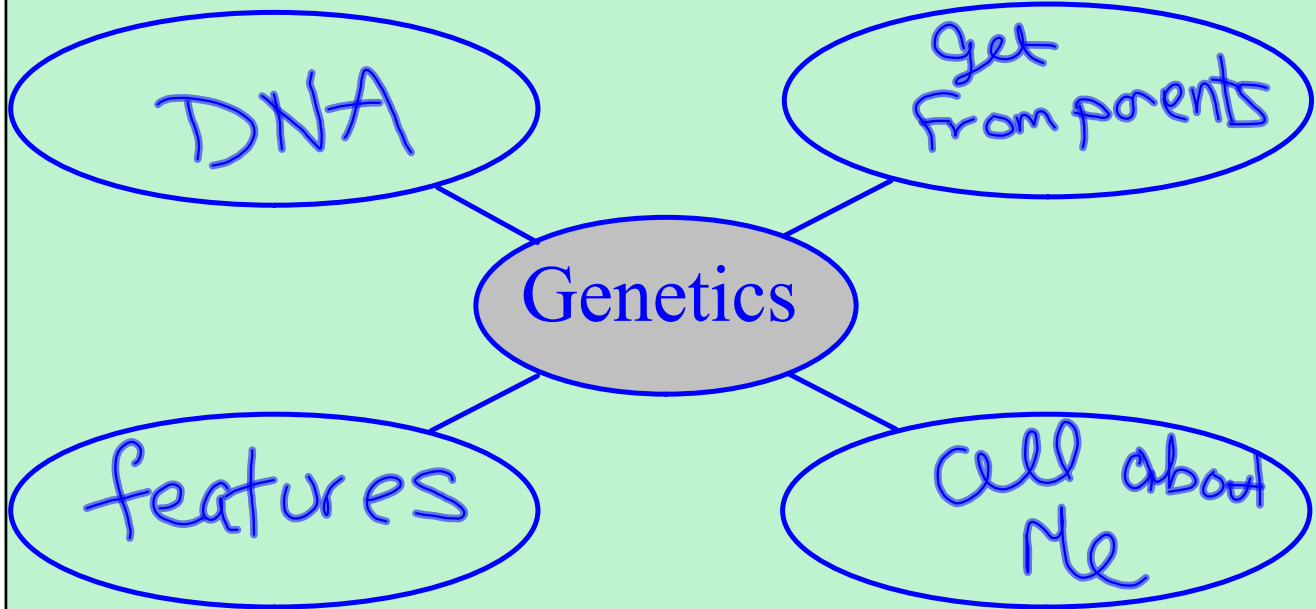


What is Genetics?



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

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

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?

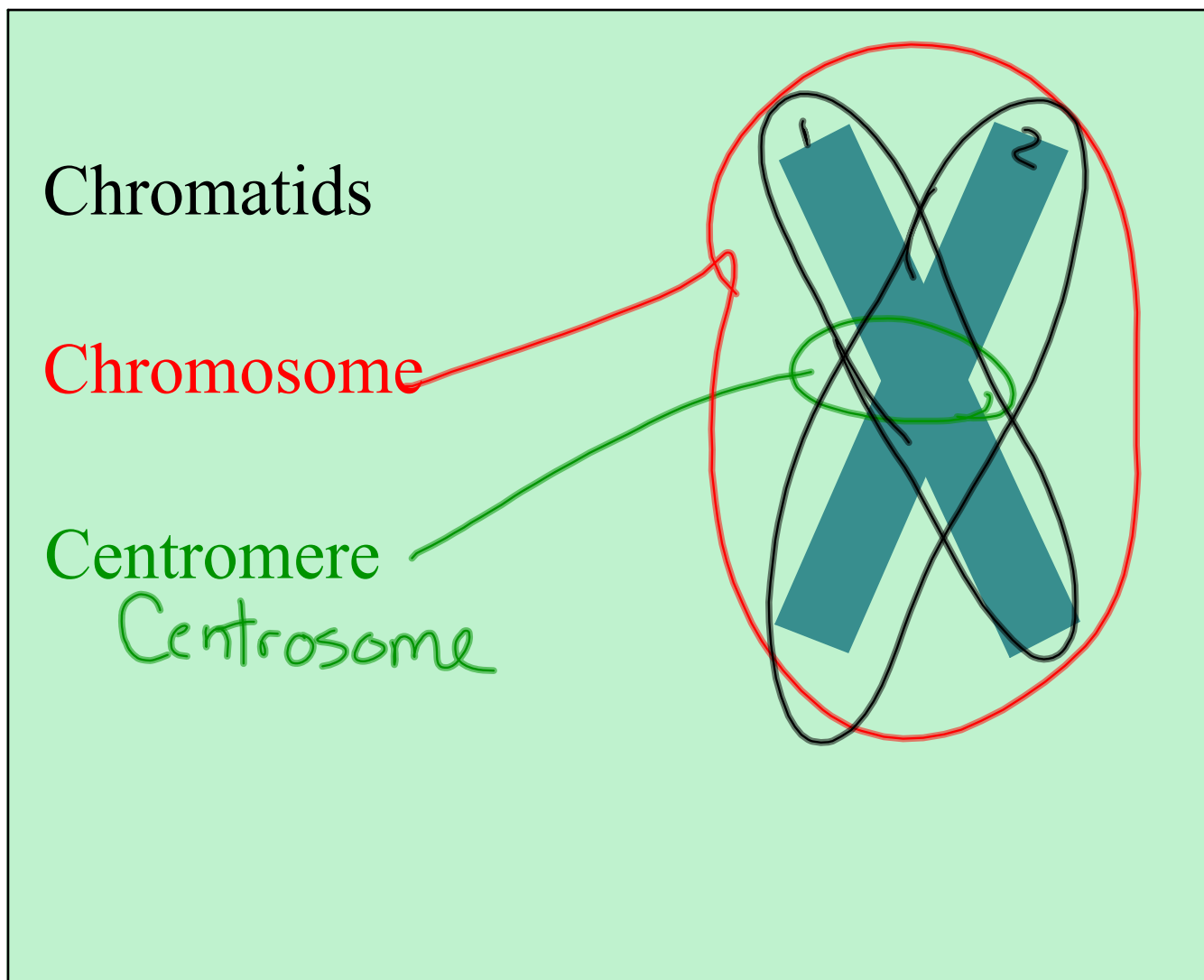
Cells are undergoing cell division.

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



Would there now be:

- a. Bigger Cells
- b. More Cells



Match the correct term to its definition.

Chromatids

Chromosome

Centromere

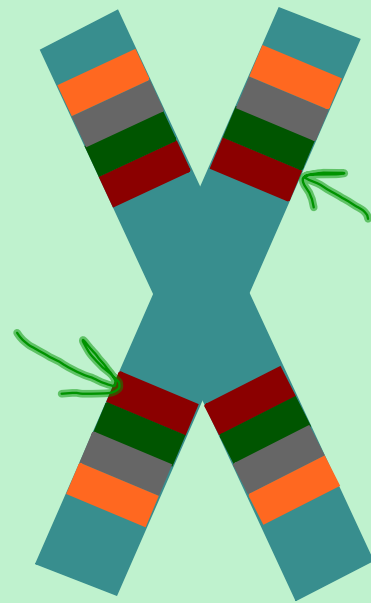
Centrosome

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.

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



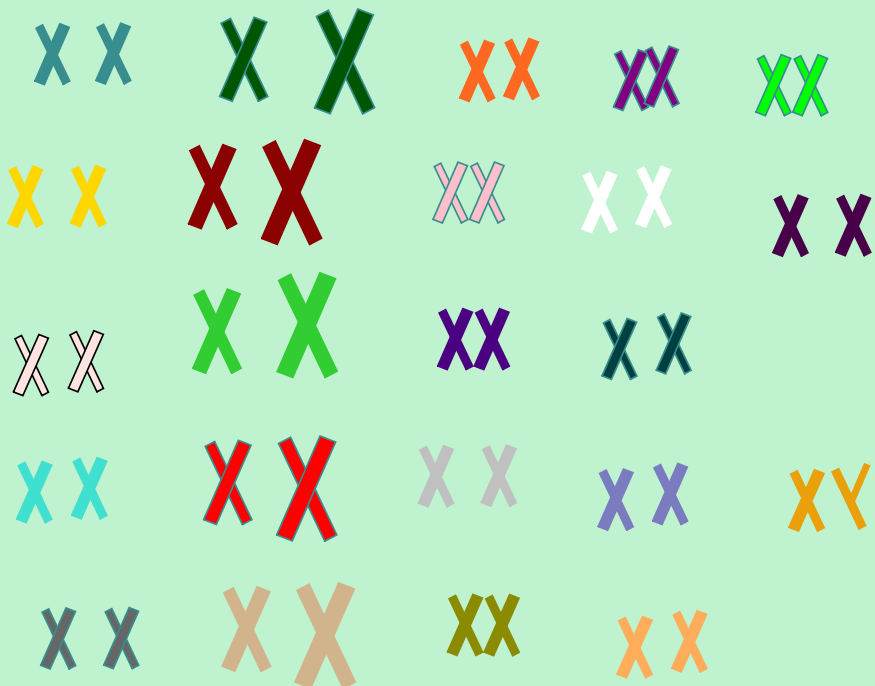
Draw an arrow to point to a gene.

How many chromosomes does a human have?

Count the
chromosomes

46

Number of Chromosomes



What do you notice about these two chromosomes?

1.

2.

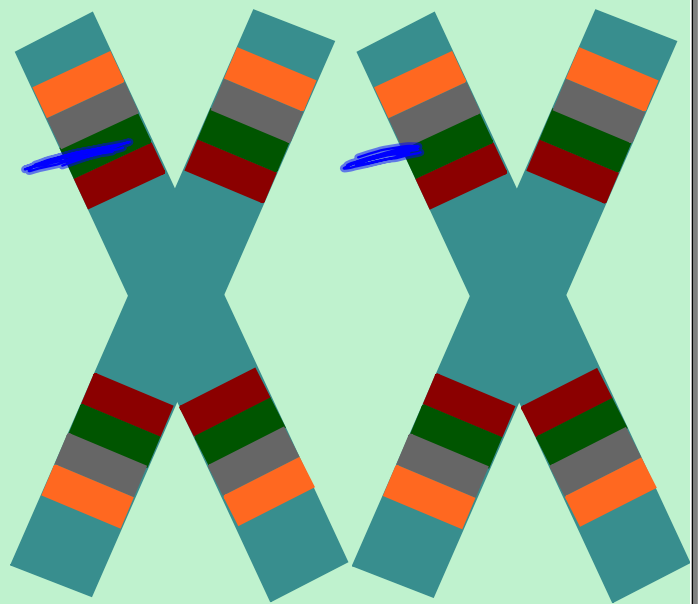
3.



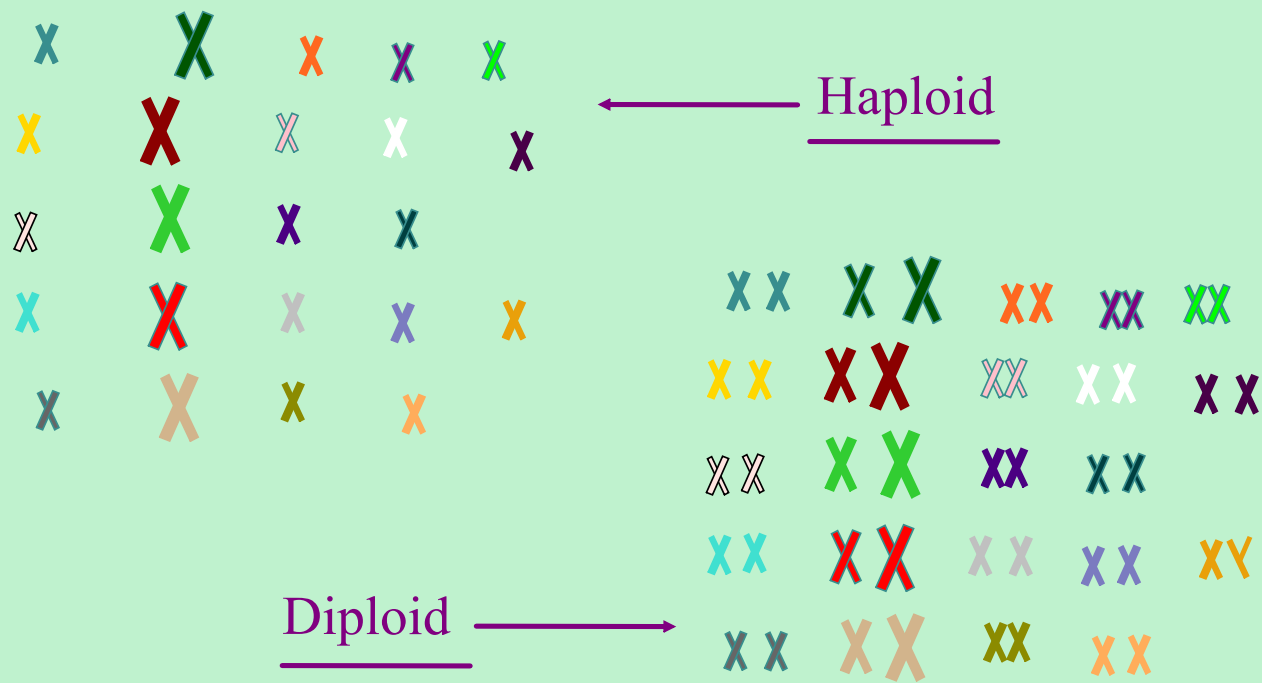
Homologous Chromosomes

Chromosomes
that are similar in:

1. Size
2. Shape
3. genetic content



Erase over the line to find the definition.



1 cell \rightarrow 2 identical

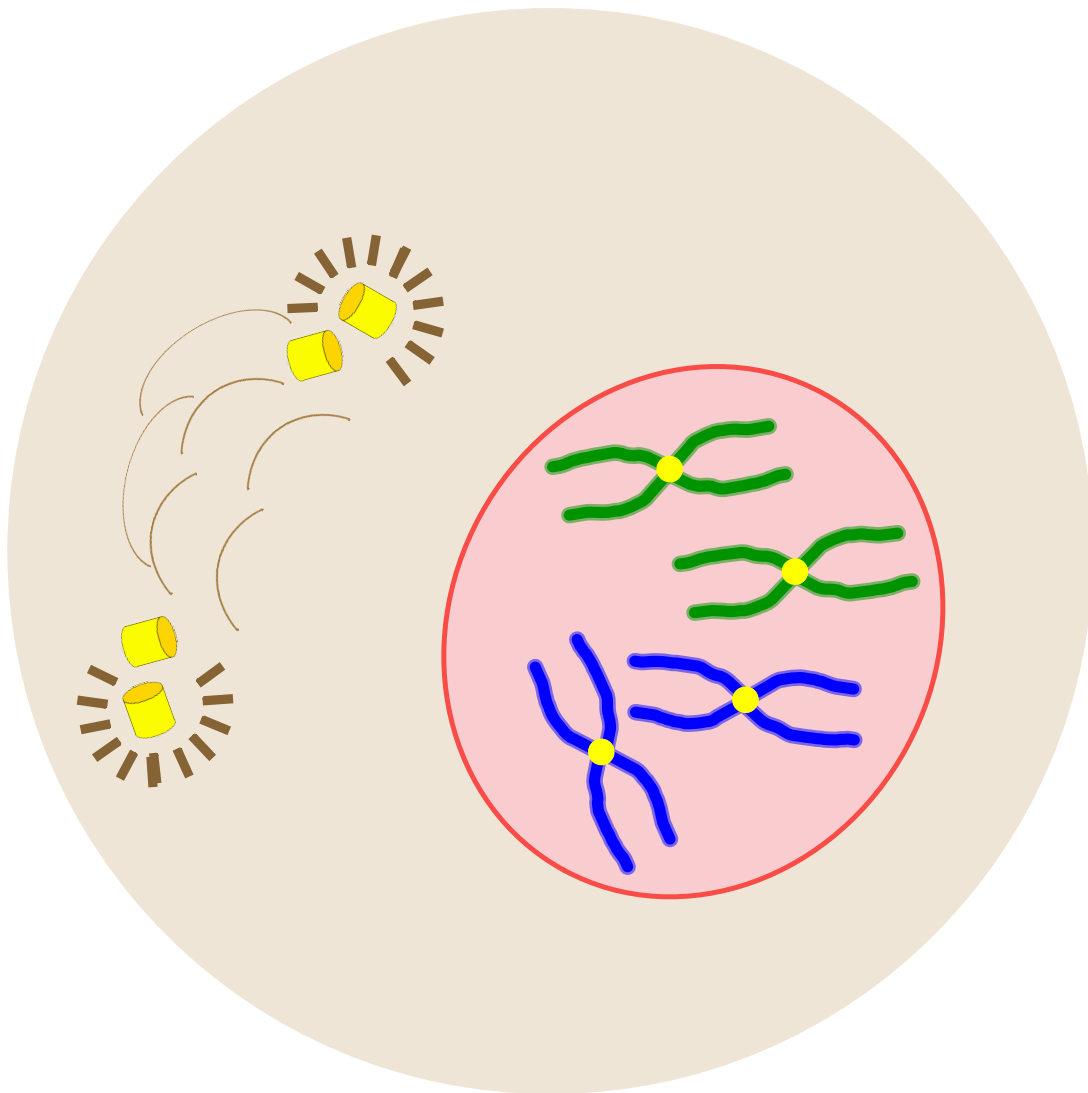
P rophase

M etaphase

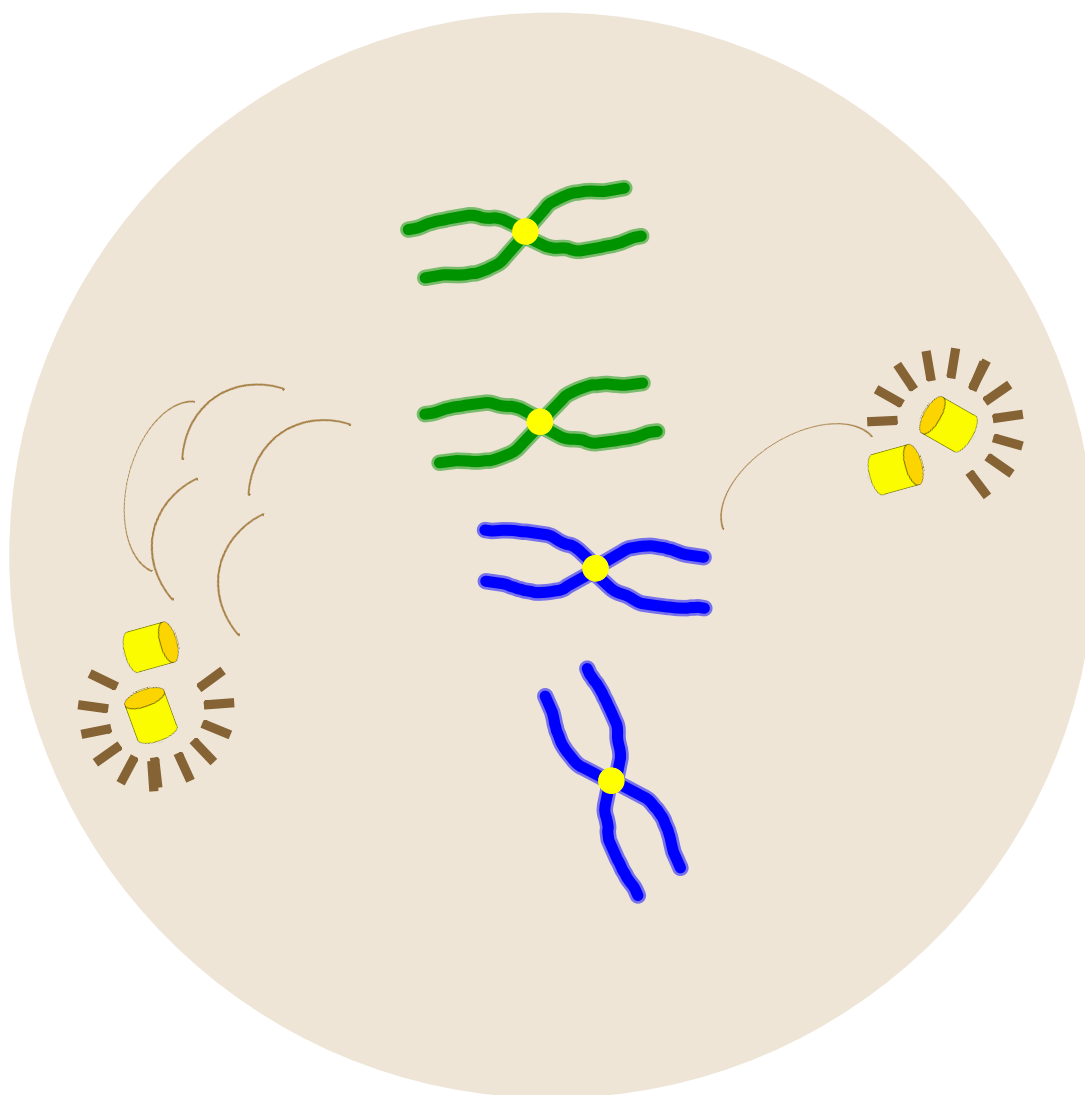
A naphase

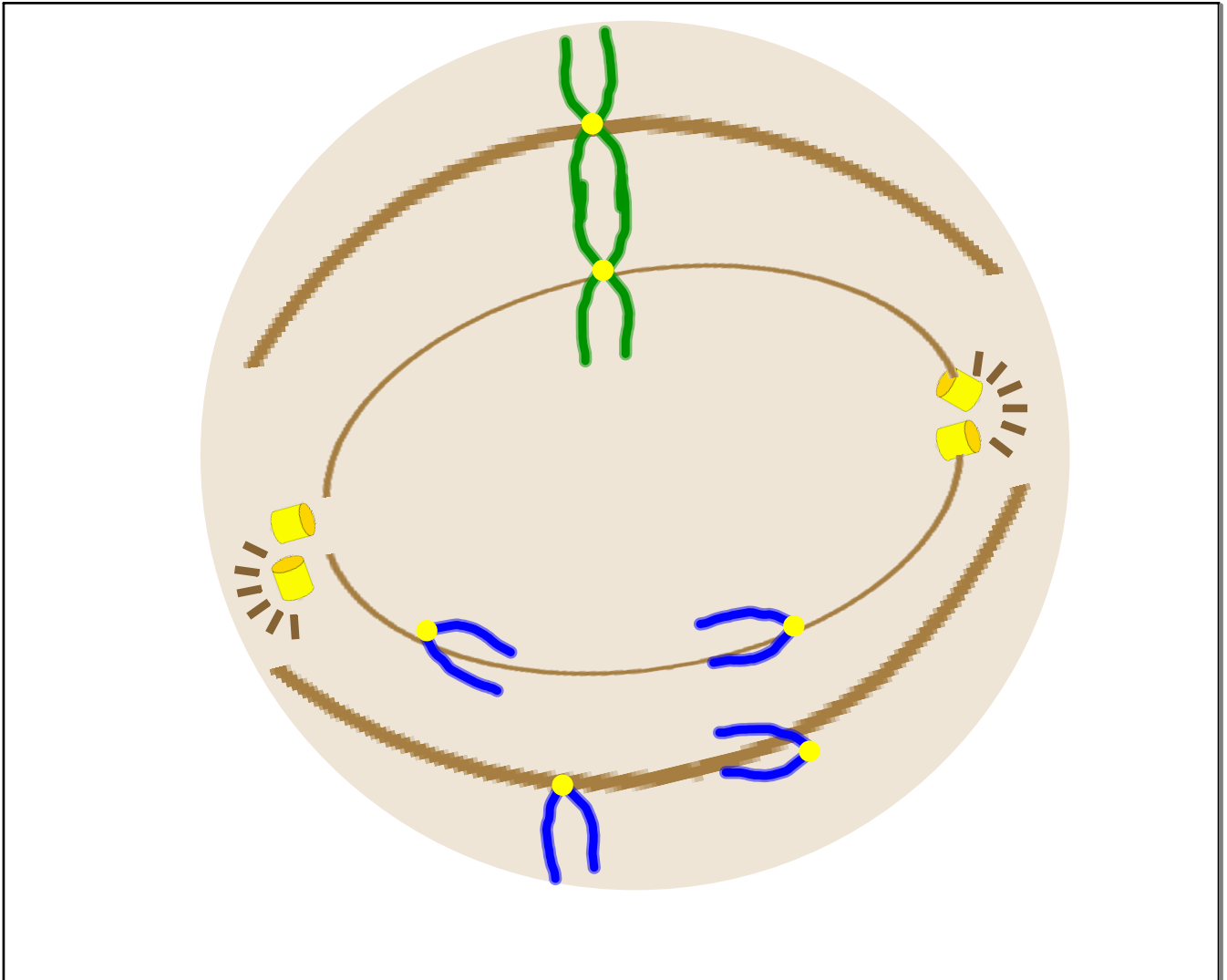
T elophase

Interphase (G_1 , S , G_2)
DNA copies

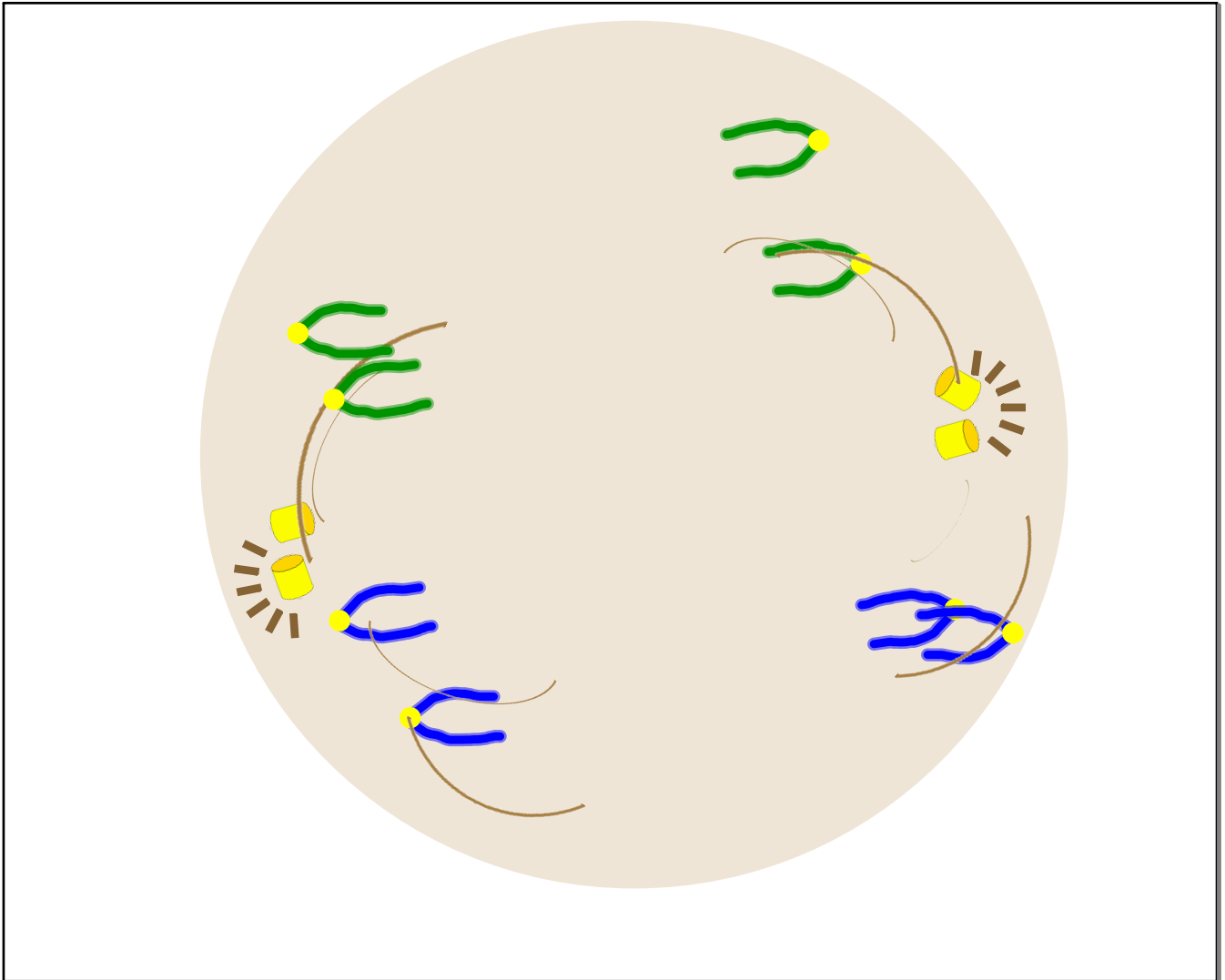


Interphase (G_1 , S , G_2)
DNA copying

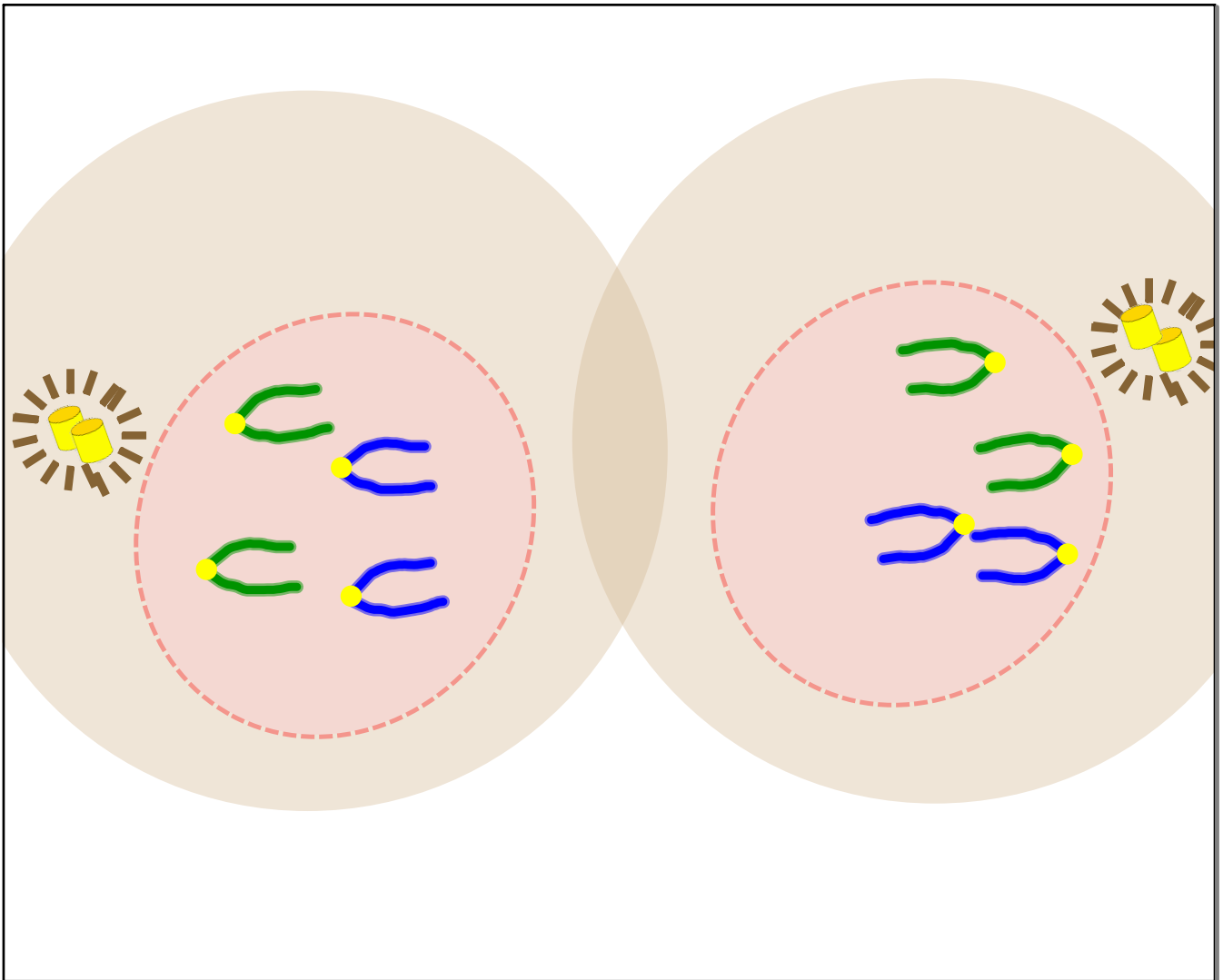




Metaphase



Anaphase



Telophase