

March 18, 2019

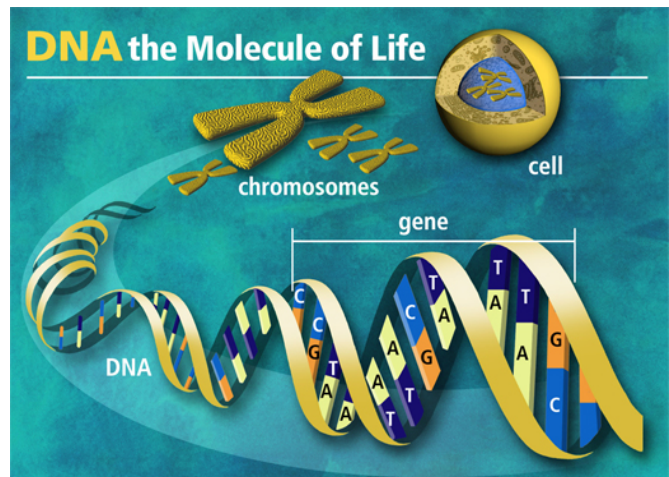
Chapter 6: A Closer look at Cell Division

1) DNA

2) Genes and Heredity/Inherited Traits

Warm-up

How long (in meters) is DNA from one cell if it were stretched in a straight line?



What is DNA ?? Video

DNA Rap

As you are watching think of the answers to these questions

What is DNA?

Discussion Questions:

- What is DNA also known as?
deoxyribonucleic acid
- What is the shape of DNA?
spiralled ladder, double helix, corkscrew
- How is DNA the recipe or blueprint of living things?

DNA makes RNA → proteins make life

code for life

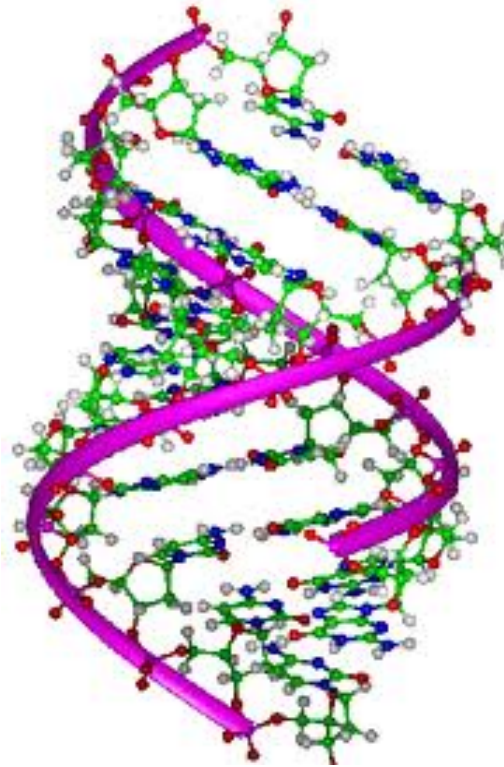
- What are the four chemicals in DNA?
*Adenine Cytosine Guanine
Thymine*

- How do they pair up? *A-T C-G*

- Where does DNA live?
*on chromosomes
inside the nucleus*

DNA

Stores the genetic information and provides the directions to guide repair and construct new cells



What do you think the complete name for DNA is?
Write your answer in your notebook.

The complete name for DNA is

deoxyribonucleic acid

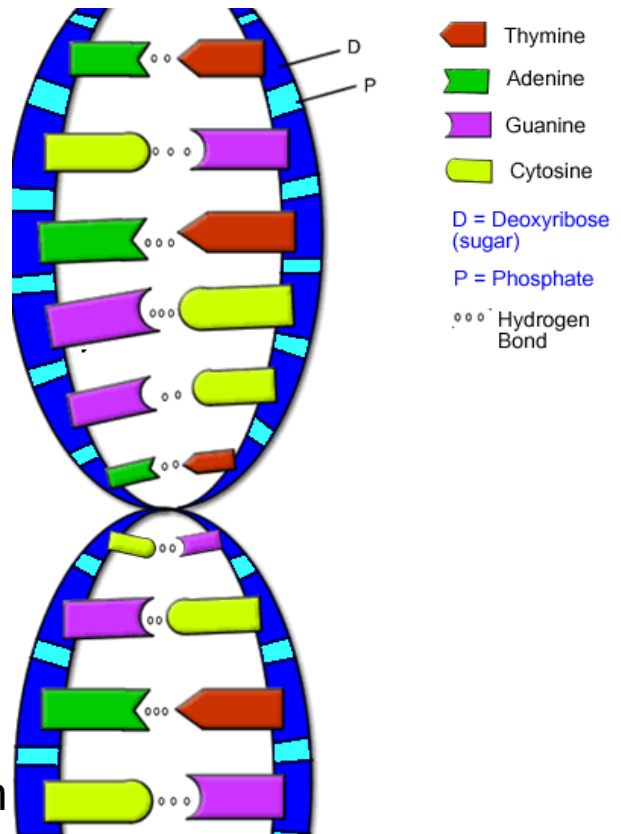


DNA is a double helix that contains a series of chemicals.

These chemicals are arranged like letters in a code. DNA has a four character code

A = Adenine
T = Thymine
C = Cytosine
G = Guanine

These codes combine to form genes.



Chromosomes



threadlike structures that contain the genetic information. Inside the chromosomes there is a chemical called DNA.

Chromosome

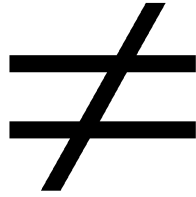
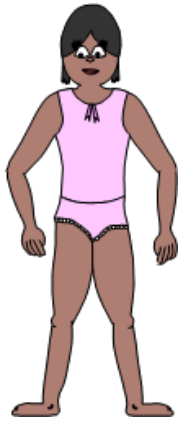


DNA



ADAM.

**DIFFERENT SPECIES HAVE
DIFFERENT CHROMOSOMES.**



**BUT ALL SPECIES ARE COMPOSED OF
THE SAME CHEMICAL, DNA. OUR
GENES MAKE US DIFFERENT.**

How many chromosomes do each of the following have?

Humans? **46**

Dogs?

Mouse?

Horse?

Earthworm?

Cat?

Goldfish?

Potatoes?

38

40

39

78

36

64

104

44