

Names:

Section 1

What is DNA and what sort of information does it store?

How is DNA passed on over time?

What shape is DNA and where is it found?

Name the four chemicals (bases) that make up DNA.

Section 2

What percentage of DNA do all babies share? What are the implications of this fact?

What is a genome?

Section 3

Describe the cause of Tay-Sachs disease.

What do genes do or create?

Section 4

Why is sequencing the entire human genome useful?

How was the sequencing of the genome sped up or improved?

Section 9

How do genes, proteins, and organisms interact or relate to one another?

Describe the difference between genes and proteins.

To be completed with videos found at: http://www.pbs.org/wgbh/nova/genome/program_adv.html

The function of proteins is dependent upon what?

Section 10

Do genes or proteins act in isolation? What may influence or affect a gene or protein?

What do genes do?

Define a proteome.

Section 12

Why would scientists care to compare the DNA and medical records of family members?

Section 13

How would you feel about donating your DNA to a database? Why?

What are gene chips used for?

Section 14

Would you want to be tested for a genetic disease that may not be treatable? Why or why not?

Section 15

Describe your thoughts on the potentials of genetically enhanced organisms.

Section 16

How are genes distributed on chromosomes?

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