

3-2-1 Exit cards after watching Human Genome movie.

Students were asked to answer the following three questions:

1. name three things you learned
2. name two things that surprised you
3. name one thing that you still have questions about

1. I learned

1. amino acids change protein shape

2. NO technologies to change DNA code

3. DNA tells body how to make protein

2. 99.9% of humans are alike =

2. 50,000 gene words

3. How ribosome is like a machine

3. The amino acid order determines the proteins shape. DNA sequence are unique in each individual, making all 99.9% alike. 5% of chromosomes are instructions for cells.

2. mitochondrial DNA comes from mothers only. Cells act as an assembly line.

1. why would people want to change?

I learned that we're more alike than we think.

There's a gene that allows you to have no cholesterol.

- 1) I learned that 1 out of 1000 bases are unique in DNA sequences
 - 2) I learned that 99.9% of all people are alike
 - 3) I learned that only 2% of the genome are instructions for cells
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- 2) What surprised me was that the body had no calculator
 - 2) What surprised me was that there is no way you can change your DNA
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- 1) Can I have Pizza too please.

3 I learned as follows: there are 23 pairs of chromosomes, 99.9% of people are alike, and cells work like a machine.

2) What surprised me is as follows: 99.9% are alike, and DNA tells the body how to make proteins.

1) What did Alan Wilson actually do?

I did not know that amino acids are added and determines the fold of proteins take, which determines how the protein works.

- 1) Meiosis produces sex cells.
- 2) Duplication, regeneration, budding and cloning all happen through asexual reproduction
- 3) DNA has a certain code.

- 1) There are 46 chromosomes in the human body.
- 2) A + T go together and C + G go together

1) Can you survive without your DNA?

3. I learned if one letter in DNA is different it can effect the whole entire thing.
- 99.9% of people are alike
 - Allen Wilson is the scientist who traced migration of humans based on Mitochondrial DNA
- 2 - I was surprised that some differences in DNA can be helpful
- Body cells are told by DNA code how to make proteins

- 1.) average body contains 100 trillion cells.
 - 2.) that people are 99.9% alike
 - 3.) that there are people who don't have to worry about cholesterol:
 - 1) the babies born in the bath tub!
 - 2) that you can be protected from cholesterol.
- 1.) that proteins are assembled by the body on the order of nucleic acids in mRNA 2.) mRNA

- ① • An average adult human body contains 100 trillion cells.
 - Only 5% of the chromosomes are instrux for cells.
 - Ribosome & molecule in the cell act a factory
- ② • A woman had a baby in the bath tub.
 - Some people can eat anything without being affected.
- ③ How do ribosomes act like a factory