



Name: _____

Date: _____

Evolution - Lesson 1

Chimpanzees
evolution
nucleus

unique
complicated
passed

twisted
bodies
cells

tissue
wondered
reproduce

body
mutation
blocks

Have you ever _____ why elephants have long trunks, giraffes have long necks, or cheetahs can run so fast? Everything we see living around us is the result of _____.

Every organism is made up of _____. These cells have a _____ that contains chromosomes that hold DNA. DNA is short for deoxyribonucleic acid. It is a group of atoms stuck together to form a molecule. DNA is the shape of a double helix, which looks like a ladder _____ many times into a spiral. These chain-like chemicals have genes that include coded information that builds different species, including humans. Every species has _____ DNA.

In simple organisms, like a single-celled amoeba, reproduction happens by copying DNA within their own _____. Then it moves each copy to one side and splits it into two fully formed organisms.

Sometimes errors happen when copying the DNA, changing the DNA code a little. This is called DNA _____. These mutations cause changes in the body shape and characteristics of the organism. Then, these new characteristics will be _____ on to the new generations, resulting in the evolution of that species.

Evolution in humans and other larger creatures, such as dogs, cats, whales, etc., is more _____. Humans have over 3 billion cells, and each cell has a job. Some cells make our

bones, some our brain, some our skin, etc. Altogether, they make our _____.

The body has 20 different amino acids that stick together to form proteins. Proteins combine to form cells, and the cells combine to form _____. Tissues combine to create muscles, bones, and organs that, when put together, become humans and other living organisms.

The DNA tells the amino acids how to combine to make perfect proteins that form the different kinds of cells that are our bodies' building _____.

Humans and other multi-celled organisms _____ by combining the DNA of the mother and father.

The babies are a random mix of the DNA from both parents. This results in different traits and characteristics for each generation, like more prominent noses, longer legs, blue eyes, etc. Evolution in multi-celled organisms happens slowly and gradually over thousands or millions of years.

Did you know the DNA in all humans is 99% the same? Only 1% of our DNA is different from other humans and makes us unique. We also share 98% of the same DNA with _____.