

Cell Biology

Name:

Brainpop - Cell Specialization

Period:

Watch the Brainpop on cell specialization, then fill in the blanks using the words provided in the word bank below each paragraph. You can also use Chapter 4 to help you.

There are _____ basic types of cells, prokaryotic and eukaryotic. Prokaryotic cells don't have any _____ around their nuclear material. They're _____-celled organisms that can live on their own. Eukaryotic cells are what we're made of. They have a _____ of hereditary material (DNA) that's surrounded by a membrane and _____ the life of the cell. Plant and animal cells are both _____.

controls eukaryotic membrane nucleus single two

Cells come in all _____ shapes and sizes. The size and shape of a cell can sometimes tell you something about its _____. One nerve cell in your leg can be a meter long! Those little "fingers" on each end, called _____, let _____ jump from one nerve synapse to the next. A red blood cell is about one-tenth the size of a _____ on your computer screen. It's a tiny _____ disk that can move through even the narrowest blood vessels. A plant xylem cell is long and hollow with holes in it so it can _____ water and minerals through the plant.

dendrites different flexible job period signals transport

Plant and animal cells are pretty similar inside but there are two major _____. Plant cells can make their own _____ and animal cells can't. Plant cells' green color comes from green organelles called _____. Chloroplasts trap light energy and enable plants to conduct _____. Animal cells are surrounded with a flexible _____. Plant cells have a membrane too, but outside of that, they protect themselves with a stiff outer _____. Both plant cells and animal cells work in _____. When you take a tiny piece of a plant, there are tons of cells clustered together in that piece working _____. The same is true for a piece of an animal.

cell membrane chloroplasts differences food photosynthesis teams together wall

You saw the image below in the Brainpop. Why do cells come in so many different shapes and sizes?

