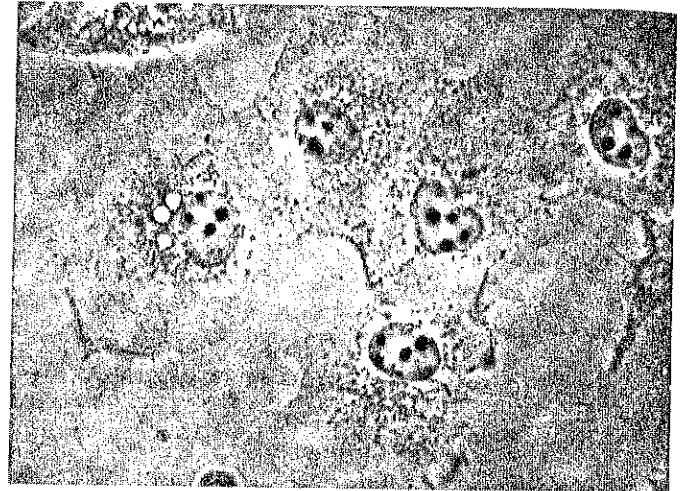




What Cells Do

Guess whose job it is to keep us alive and healthy? You may think our heart is what keeps us alive. This is a very important organ, but something else is important, too. If you could look on a smaller scale inside your body, you would see that our cells keep us alive.



(Kidney cells)

Try to think of a cell as a tiny factory. Within the factory there are many parts, or structures, that work together. These parts let the factory run smoothly. Would a real factory be productive if people didn't show up for work? Parts of a cell must also work together for it to work smoothly and to keep the organism alive. The cell "factory" has a "boss" (**nucleus**) who directs all the cell's activities. It also has a "power source" (**cytoplasm**) which provides energy to carry out these activities. It also has a "front door" (**cell membrane**) that controls which materials can go in and out of the cell.



What different jobs do you think a factory boss would have to do to make sure the factory runs smoothly?

Now let's look at **cell specialization**. When a person is **specialized** in something, it means they have a unique and special **function**. They have their own job to do. Cells do too! Most multicellular organisms are made up of many specialized cells. This means that different cells carry out different functions to help keep the organism alive. Each cell has its own job, but they must still work together as a "team". For example, liver cells need other cells in the body (blood cells) to feed them oxygen and nutrients. So, both liver cells and blood cells work together as a team. Some specialized cells store food. Some carry nutrients to other cells. But remember that no matter what their job is, cells all have one main job: to keep the plant or animal alive.

NAME: _____



What Cells Do

1. **Circle** the word **True** if the statement is true. **Circle** the word **False** if it's false.

a) Cells all have different jobs to do, but their main job is to keep the organism alive.

True **False**

b) Parts of a cell do not have to work together. As long as they do their own job, the organism will survive.

True **False**

c) The cell's nucleus is like a front door. It controls what materials can go in and out of the cell.

True **False**

d) Each cell carries out a special function to help keep the organism alive. This is called cell specialization.

True **False**

e) Storing food and carrying nutrients are both examples of how cells are specialized.

True **False**

2. Write each word beside its meaning. There is **ONE** word that does **NOT** have a matching definition! Use the reading passage to write a definition for the remaining word.

cytoplasm

nucleus

cell membrane

cell specialization

a) This is the dark center of a cell. It acts as the cell's brain.

b) A jelly-like substance found inside the walls of a cell.

c) Cells carry out their own special functions. In this way they help keep the organism alive.

d) _____