

# What Is a Cell?

1. Fill in each blank with a word from the list below. You may use a dictionary to help.

matter      cell      magnify      microscope      organism      building block

- a) If something is too small to see, you can use a(n) microscope to magnify it.
- b) A(n) organism is a living thing such as a plant or animal.
- c) To magnify something means to make it look larger than it really is.
- d) A piece of an object whose job is to help the object grow is called a(n) building block.
- e) Matter is anything that has mass and takes up space.
- f) The smallest unit of living matter is called a(n) Cell.

2. List what you think are the **BUILDING BLOCKS** in each of the following things. The first one is done for you as an example. There might be more than one building block. List only one!

- a) A brick house: The building block is a **single piece of brick**.
- b) A sand castle: The building block is sand particle.
- c) A stack of pancakes: The building block is one pancake.
- d) A pad of paper: The building block is a piece of paper.
- e) A piece of paper (a tricky one!): The building block is grain of paper.
- f) A Lego hospital: The building block is a Lego block.
- g) A pile of laundry: The building block is a piece of clothing.



# What Is a Cell?

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

a) All the cells in turkeys, dogs and flowers started as one tiny cell.

**True**

**False**

b) If you look very closely, you would be able to see a few cells that are in your body.

**True**

**False**

c) A microscope helps you see things that are so big you cannot see them when you are standing still.

**True**

**False**

d) A cell is the absolute smallest unit of living matter.

**True**

**False**

e) There are many different kinds of cells, but they all are exactly the same shape and size.

**True**

**False**

2. **Circle** the answer that best completes each sentence.

a) Matter is anything that has \_\_\_\_\_ and takes up space.

**energy**

**mass**

b) A cell is so tiny that you need to use a \_\_\_\_\_ if you want to see it.

**microscope**

**magnifying glass**

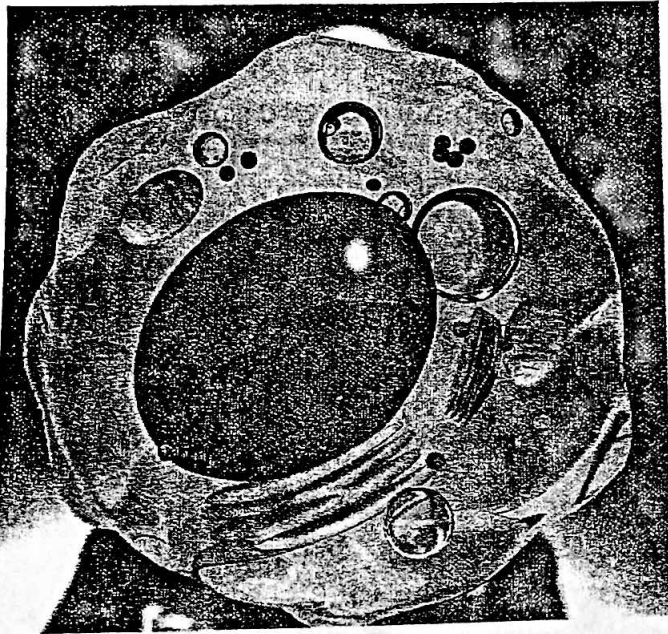
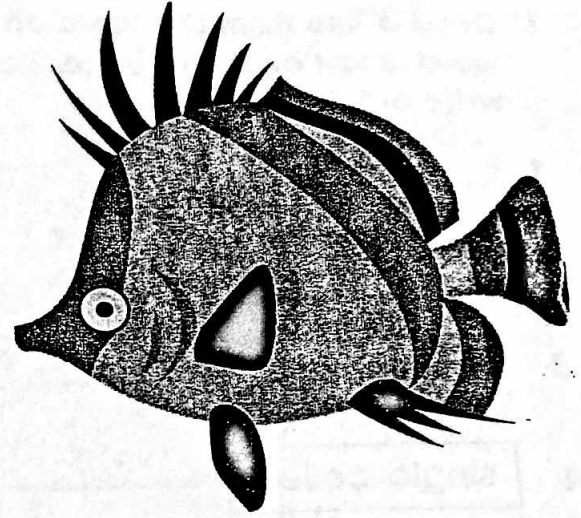
c) Everything living on Earth began life as one tiny \_\_\_\_\_.

**person**

**cell**

# Single-celled & Multicellular Organisms

**D**o you remember how your body is made up of millions and millions of tiny things called cells? We cannot even count the number of cells in our body. Humans are therefore **multicellular organisms**. Multicellular organisms are living things that are made up of more than one cell. Most things you can think of are multicellular organisms. A tree, a monkey, and a fish are all examples of multicellular organisms.



You probably would not believe it, but there are some living things that are made up of only one tiny cell! We call these living things **single-celled organisms**. **Amoeba** and bacteria are both examples of single-celled organisms. You might think these organisms are simple. They are more complex than you think! An **amoeba** is a single-celled organism that lives in the ocean, in fresh water, in soil and even inside the bodies of large animals! Some of these organisms even live in our mouths and digestive systems!

Describe what you think a **SINGLE-CELLED ORGANISM** might look like if you could see it with your own eyes.



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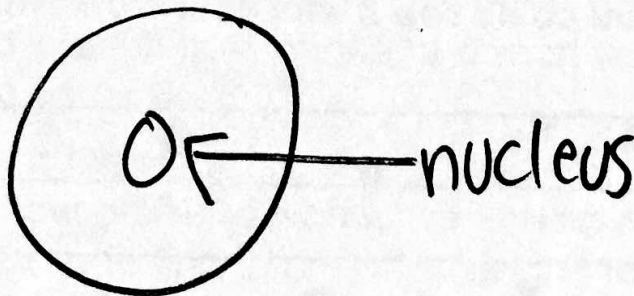
# Single-celled & Multicellular Organisms

1. Draw a line from the word on the left to its matching definition. Which word is left over? Use the reading passage or a dictionary to help you write out its definition.

- 1 organism
- 2 amoeba
- 3 multicellular
- 4 single-celled
- 5 nucleus
- 6 DNA
- 7 organelle

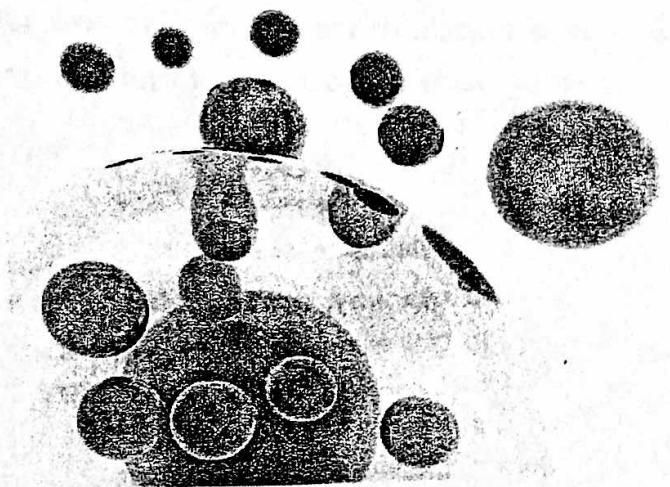
- A The structure in the middle of the cell
- B Something in a cell that carries genetic information
- C Describes an organism that is made up of only one cell
- D A simple, yet complicated, single-celled organism
- E A small structure in multicellular organisms that carries out day-to-day cell operations
- F Describes an organism that is made up of many cells
- G living thing such as a plant or animal

2. In the space below, draw what you think a cell might look like. If the nucleus is in the middle of the cell, what do you think it would look like?




# single-celled & Multicellular Organisms

**S** Single-celled organisms do not have a definite shape but they all have similar characteristics. In the middle of the cell is the **nucleus**. The nucleus is like a company's head office. It organizes all the activities in the cell. Around the nucleus is **protoplasm**. Protoplasm is a complicated structure that has many jobs to do. It consists of a double-layered membrane that is always changing.



Most living things are too large to be formed by just one single cell. These **multicellular organisms** are made up of many cells that live and work together. These cells each have their own job to do. The one characteristic that all cells in multicellular organisms have is a **nucleus**. They have a nucleus just like single-celled organisms do. In a multicellular organism, each cell's nucleus holds the cell's **DNA**. DNA is something that is small, yet complicated. It is the cell's genetic information. Another characteristic of multicellular organisms is that they have **organelles**. Organelles are small structures that help carry out day-to-day operations of the cell.

 **Can you think of THREE examples of MULTICELLULAR ORGANISMS that you might find around your school?**

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Most living things that you can see with your own eyes are multicellular organisms. This includes animals and plants. It is important not to forget the complicated, yet single-celled organisms though!



# Single-celled & Multicellular Organisms

1. Put a check mark (✓) next to the answer that best finishes the sentence.

a) Your body is made up of millions and millions of...

- A small pores in your skin.
- B veins and arteries.
- C tiny things called cells.
- D proteins and sugars.

b) A tree, a monkey, and a fish are all examples of...

- A organisms that produce their own food.
- B living things that need very little oxygen to breathe.
- C microscopic forms of life.
- D multicellular organisms.

c) The word AMOEBA describes a...

- A life form that is easily visible with your eyes.
- B single-celled organism that lives in the ocean, in fresh water, or soil.
- C an animal that has millions of cells in it.
- D the dark center of a cell.

d) A multicellular organism's genetic information (DNA) is found in...

- A the area just outside of the cell wall.
- B the cell's nucleus, the center of the cell.
- C all areas of the cell, wherever there is room for it.
- D the organism's heart and lungs.

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

a) Multicellular organisms are living things that are made up of exactly one cell.

True                      **False**

b) There is no organism that is made up of only one tiny cell.

True                      **False**

c) Single-celled organisms do not have a definite shape but they all have similar characteristics.

**True**                      False

d) Not all cells in multicellular organisms have a nucleus.

True                      **False**