

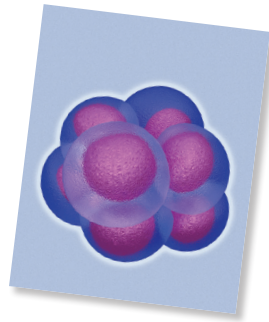


Teacher Guide

Our resource has been created for ease of use by both **TEACHERS** and **STUDENTS** alike.

Introduction

This resource provides ready-to-use information and activities for remedial students in grades five to eight. Written to grade and using simplified language and vocabulary, science concepts are presented in a way that makes them more accessible to students and easier to understand. Comprised of reading passages, student activities and overhead transparencies, our resource can be used effectively for whole-class, small group and independent work.



through creative and evaluative short-answer questions, research, and extension activities.

Hands-on activities are included to further develop students' thinking skills and understanding of the concepts. The **Assessment Rubric** (page 4) is a useful tool for evaluating students' responses to many of the activities in our resource. The **Comprehension Quiz** (page 48) can be used for either a follow-up review or assessment at the completion of the unit.

PICTURE CUES

Our resource contains three main types of pages, each with a different purpose and use. A **Picture Cue** at the top of each page shows, at a glance, what the page is for.

Teacher Guide

- Information and tools for the teacher

Student Handout

- Reproducible worksheets and activities



Easy Marking™ Answer Key

- Answers for student activities

How Is Our Resource Organized?

STUDENT HANDOUTS

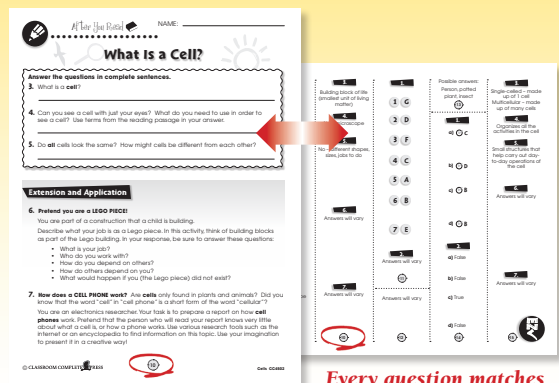
Reading passages and activities (in the form of reproducible worksheets) make up the majority of our resource. The reading passages present important grade-appropriate information and concepts related to the topic. Embedded in each passage are one or more questions that ensure students understand what they have read.

For each reading passage there are **BEFORE YOU READ** activities and **AFTER YOU READ** activities. As with the reading passages, the related activities are written using a remedial level of language.

- The **BEFORE YOU READ** activities prepare students for reading by setting a purpose for reading. They stimulate background knowledge and experience, and guide students to make connections between what they know and what they will learn. Important concepts and vocabulary are also presented.
- The **AFTER YOU READ** activities check students' comprehension of the concepts presented in the reading passage and extend their learning. Students are asked to give thoughtful consideration of the reading passage

EASY MARKING™ ANSWER KEY

Marking students' worksheets is fast and easy with this **Answer Key**. Answers are listed in columns – just line up the column with its corresponding worksheet, as shown, and see how every question matches up with its answer!



Every question matches up with its answer!



The Parts of a Cell

3. Pick TWO cell parts from the following list:

- cell membrane**
- cytoplasm**
- nucleus**
- cilia**
- organelles**

Answer the following questions:

- What does the cell part look like, or where in the cell can it be found?
- What is the function of this cell part?

a) **cell part:** _____

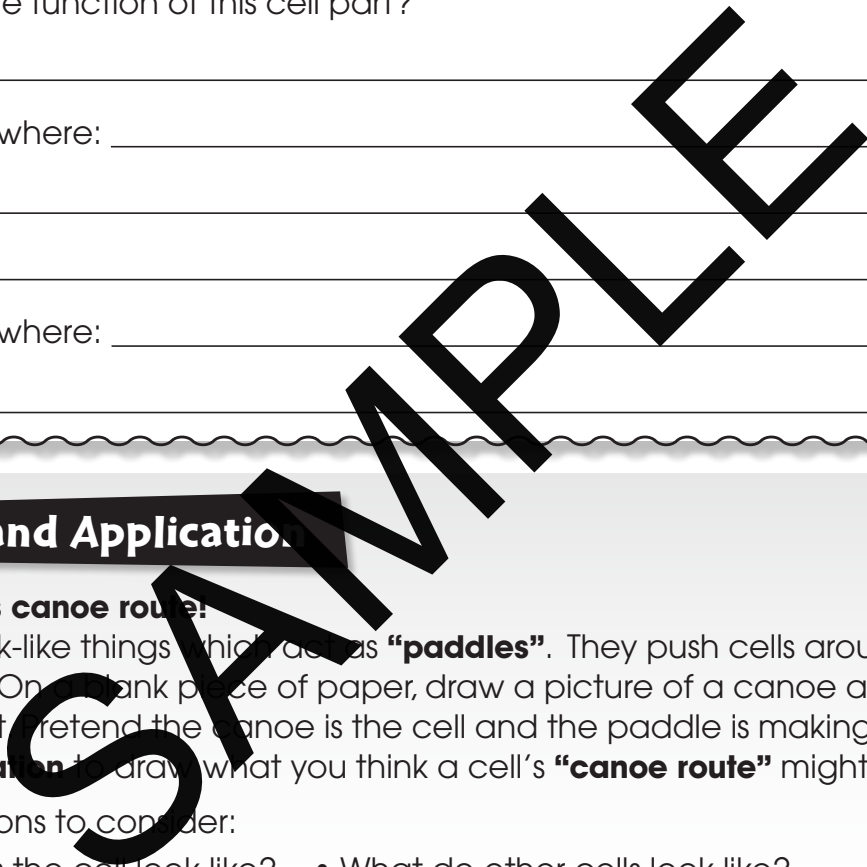
looks like/where: _____

function: _____

b) **cell part:** _____

looks like/where: _____

function: _____



Extension and Application

4. Draw a cell's canoe route!

Cilia are stick-like things which act as "**paddles**". They push cells around and make them move. On a blank piece of paper, draw a picture of a canoe and a person paddling in it. Pretend the canoe is the cell and the paddle is making a cell move. **Use your imagination** to draw what you think a cell's "**canoe route**" might be.

A few questions to consider:

- What does the cell look like?
- What do other cells look like?
- When the cell moves, what things does it move around?

5. A conversation between a nucleus and a cell membrane!

Pretend you hear a conversation between a **nucleus** and a **cell membrane**. They are discussing what they look like, where they are found in a cell, and what their important jobs are.

Using a dialog structure (see below), write out their conversation.

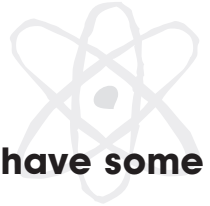
NUCLEUS says: _____

CELL MEMBRANE says: _____

(Repeat order to continue conversation...)



Sculpt a Plasticine Cell!



We have learned that even though all cells are different, they have some parts in common. There are three parts that all cells have in common.

Do you remember what they are?

CLUES...

1. The outside covering that holds all parts of the cell in place is called... a **cell membrane**.
2. The dark part located in the middle of the cell (the “brain” of the cell) is called... a **nucleus**.
3. The jelly-like substance that fills in the inside of a cell, where all the cell’s activities take place is called... **cytoplasm**.

FOR THIS ACTIVITY, you will need:

- 3 different colors of plasticine
- 3 toothpicks
- small pieces of paper
- tape

STEPS:

1. Use plasticine to **sculpt** what you think a cell would look like based on the three cell parts described above. Use a different **color** for each cell part. The cell should be **at least** the size of your hand.
2. Once you have finished sculpting your cell, place the toothpicks in the plasticine. You will use them as markers for the different cell parts.
3. On a small piece of paper, write down the cell part. “Flag” it by taping the paper label to the toothpick.

When you are finished, someone should be able to look at your plasticine cell and see the three different parts labeled. Have fun sculpting!

Parts of a Cell



- | | |
|---------------------------|--------------------------------|
| A Cell Membrane | J Microtubule |
| B Nuclear Envelope | K Vacuole |
| C Nuclear Pore | L Lysosome |
| D Nucleolus | M Microbody |
| E Chromatin | N Microfilament |
| F Nuclear Sap | O Ribosome |
| G Mitochondrion | P Endoplasmic Reticulum |
| H Golgi Complex | Q Hyaloplasm |
| I Centriole | |

