Instructional Procedure:

Day 1

1. The teacher displays a variety of pictures of plants and animals and generates a discussion of what characteristics all living things have in common. Students brainstorm in their teams a list of characteristics and life functions of all living things.
2. Teacher directs the students’ attention to the microscope station and emphasizes that there is one more thing that all living things have in common. All living things are made up of cells that carry out the same life functions that we discussed. Students view the various plants and animal slides. Students view slides and list and discuss their observations.
3. Teacher directs the students’ attention to the animal cell and plant cell posters and discusses the function of these organelles: cell membrane, nucleus, cytoplasm, vacuoles, mitochondria and the cell wall and chloroplasts in plants. Students label their diagrams.
4. Teacher distributes graphic organizer *The Living Cell* and directs the students to listen to Discovery Education’s video of the same name. Students record key facts and ideas. Closure: Cells are the building blocks of all living things.

Day 2:

Guided Reading: *Inside a Cell* by Linda Roach.

1. Microscope station: Have a prepared slide of an onion cell and a skin cell. Have students view and draw what they see. Students should label the nucleus, cell membrane and cytoplasm.
2. Distribute books and have students preview. Point out that we will be reading to learn more about the parts of a cell and their functions in a plant and animal cell.
3. Distribute graphic organizer and note that as we read we will take notes about the main idea and details in each section.
4. Students read and teacher monitors comprehension and note taking.

Day 3: Plant Cell Cookie Quiz

(Alternate: Build with colored clay or Play-Doh)

Cytoplasm: cookie dough

Cell wall: crisp cookie edge

Cell membrane: rainbow sprinkles

Nucleus: Hershey Kiss

Mitochondria: red M&M’s

Vacuole: marshmallow

Chloroplasts: green M & M’s

Teacher distributes materials to each team. Students build cookies and quiz each other on the parts and functions as they create their plant cell model. After the cookies are baked, the students are quizzed orally by the teacher on the names of the organelles and their functions. The repetition helps all students to master these facts. Cookies are enjoyed and plant cell parts are remembered by all.