

**Project FOCUS
Best Lessons
FIFTH GRADE**

Title of Lesson: Edible Cell

Theme: Life Science

Unit Number: 1 **Unit Title:** Cells and Microorganisms

Performance Standard(s) Covered (enter codes):

S5L3a

S5L3b

S5CS3

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

cells, animal cell, plant cell, cell wall, cell membrane, mitochondria, chloroplast

Learning Activity (Description in Steps)

Abstract (limit 100 characters): understanding for how the organelles of the plant and animal cell function.

Details:

1.) Setup

- a.) List what each item represents on the board
- b.) Prepare a bowl of each organelle

2.) Provide instructions

- a.) Assign animal or plant to each student
- b.) Tell students what each item represents (including the cell membrane)
- c.) They are to pick out their own materials
- d.) They are not to talk to one another during this activity
- e.) Once they are done they are to raise their hands until the teacher can check their work

3.) Pass out materials

- a.) Paper towels
- b.) Sugar cookie

c.) Knife with icing

4.) Let students select their own materials

a.) Send them to the materials table in groups of 3-4

5.) Check their work

a.) If they do not have it right give them two chances to correct it

b.) When they have it right they can eat their EDIBLE CELL!

Materials Needed (Type and Quantity):

Paper Towels

Sugar Cookies White Icing (Cytoplasm)

Plastic knives

Pull n' Peel Twizzlers (Cell Wall)

Mini Reeses Cups (Nucleus)

Green Mike and Ikes (Chloroplast)

Red Mike and Ikes (Mitochondria)

Yellow Mike and Ikes (Animal Vacuole)

Circus Peanuts (Plant Vacuole)

***For the cell membrane, I had them spread the icing on the cookie but leave a thin line all the way around to represent the cell membrane!**

Notes and Tips (suggested changes, alternative methods, cautions):

This activity accesses the student's understanding of the differences between plant and animal cells. It is an excellent alternative to a formal written test because it is FUN!

Sources/References:

1) Harcourt Science Publishers "Science Grade 5"

2)

3)