

Do the Science

Instructional materials (text; kit) PH Cells and Heredity Grade level 7

Big Idea: All organisms are composed of cells. LS1A _a	
Lesson Learning Target: Draw and describe a plant cell as observed through a microscope.	Common Misconceptions: Cells are hollow; cells are static; cells are not composed of smaller parts; cells are not living; cell wall is not a boundary; huge plant = huge cell; mass of cells is thought to be one cell
Success criteria: <ul style="list-style-type: none"> I can clearly focus a microscope using L-M-H objective I can create an Accurate, Big, Colorful, Detailed diagram of a plant cell I can describe my observations 	Vocabulary: <ul style="list-style-type: none"> Microscope parts Total magnification Chloroplast Cell wall Diagram Photosynthesis Cell membrane Nucleus
Elicitation Activity*: Prep a wet mount slide of elodea.	Talk Structures/Discourse Strategies: Students work in pairs Discourse: Student to student 1-3. Whole class Discourse: Teacher to class; Student to class 4-6. Students work in pairs Discourse: Student to student; Graphic; Written
Target introduction/lesson Activities: <ol style="list-style-type: none"> Materials list and lab expectations Revisit rubric, word wall, ABCDs of diagramming View video clip of elodea wet mount slide Microscope: start on L-M-H (adult check for understanding on low)* Diagram Complete observation (Scaffold with rubric, ABCDs, and prompts for observation: movement, patterns, shapes, details) 	

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Embedded Formative Assessment/s:

Adult initial for microscope on low objective
ABCD diagram of cell
Description of cell

Adjustment Trigger *What level of student performance will necessitate an instructional adjustment?*

Not able to focus microscope
Diagram is too small, or lacks detail, or is not accurate
Not using words from word wall in description

Instructional Adjustment (if needed):

Quick directive reminders:

- Microscope: How to focus
- Diagram: Refer to rubric, ABCDs, and exemplars
- Description: Refer to word bank

Reflection:*

I used to think _____. Now I think _____. I still wonder _____.

* Opportunity for formative assessment