Inductive Model

Phase 1: Identify Area of Study

- Students need to learn about cells in order be able to meet standard on MS-LS1-1 and MS-LS1-2.
- In order to do this, they need to understand the differences between the types of cells - this is the area of study.
Phase 2: Collect/Enumerate Data

- Students are given 24 pictures of various cells, and work with a partner to sort them.
- View other groups sortings, then discuss how/why they grouped the cells the way they chose to.

Small sampling of the cell pictures that students were given to sort.
Phase 3: Examine Data

- 19, 20, 10, 15, 31, 18, 14, 13
- Oval-shaped
- Call them "oval shapes" inside of them
- Look like "something" outside

- 1, 2, 3, 7, 11, 8, 20, 9, 23, 6, 16, 17, 9, 24
  "No eggs"
  "Look like eggs (out of skin)"

- 3, 4, 11, 14
- Look like scales on a snake
  Have some sort of water distance

- 22, 6, 7, 1, 2, 24, 5, 9, 8
  Look like eggs (no scale)
  "Nucleus"
Phase 4

- Students go on to resort the cell pictures, and further discuss.
- Guide to asking the question “Do ALL cells have organelles?”
- Prompt to research that.

Phase 5

- Groups then did research online to find answers.
Phase 6

- To further help this idea along, students read and article on CK12.org about prokaryote and eukaryote cells.
- Look at various cells under the microscope and identify which are prokaryotic and which are eukaryotic.