Lesson Plan 2

Subject/Grade Level: Science, Grade 7

TEKS: 112.19 Science, Grade 7. (b) (12) (C) recognize levels of organization in plants and animals, including cells, tissues, organs, organ systems, and organisms

ELPS: 74.4 (c) (3) (E) share information in cooperative learning interactions 74.4 (c) (5) (B) write using newly acquired basic vocabulary and content-based grade-level vocabulary

CCRS: Science Standards. I. E. 2. Use essential vocabulary of the discipline being studied.

Cross-Disciplinary Standards. I . C. $\boldsymbol{6}.$. Design and present an effective product.

Objective: Students will create a chart, flow map, or pyramid of an organism of their choice with the correct organ systems, organs, tissues, and cell type with 90% accuracy.

Focus:

"Last Class..." slide on PowerPoint. Briefly review with students the organelles of an animal cell and plant cell. **Students will get into groups and act out an organelle (teacher will give each group an organelle) in front of the class. Students will try to guess what organelle they are acting out.**

Check for understanding:

 Teacher will ask students to recall the names of cell organelles talked about last class.

"In What Order" slide on PowerPoint. Students will get into groups and organize picture cards in the order they think the pictures go in from smallest (most basic) to largest (most complex).

Check for understanding:

• Teacher will call on each group to say what order they put their pictures in, as well as some of the names they came up with for each picture.

Next slide will show the correct order of the Levels of Organization. **Instructional Delivery:**

Hand out "Levels of Organization" skeleton notes. PowerPoint presentation will go through the 5 levels of organization in brief detail. Students will fill in notes

as teacher is talking. Hand outs include pictures/diagrams students can color in at the end of the class or at home.

- "1. Cells" slide. Explain to students that we discussed cells last class. They are the basic unit of life and the first building block of organization. Explain to students that animal and plant cell are not the only type of cell there is.
- "2. Tissue" slide. Explain to students that 2 or more cells working together make up a tissue. Both plants and animals have tissue. The four types of tissue are all made up of different cells.
- "3. Organs" slide. Explain to students that 2 or more tissue working together forms an organ. Tell students that there are many more organs than what is pictured.
- "4. Organ Systems" slide. Explain to students that 2 or more organs working together form an organ system. Tell students to not get overwhelmed by the next slide because we will be going into more detail next class about the types of organ systems.
- "5. Organisms" slide. Explain to students that 2 or more organ systems working together form an organism. All living organisms share common traits.

Check for understanding:

- Teacher will ask students questions throughout the presentation and answer any questions about their skeleton notes as the PowerPoint continues.
- CELLS-
 - What are some examples of cells besides animal and plant cells?
- TISSUE-
 - How can you tell which picture are the picture is the plant cells?
- ORGAN
 - o How can plants have organs?
 - What are some other human organs that we did not see on the screen?
- ORGAN SYSTEM-
 - We will go more in depth about the different organ systems next class.
 - o What organs make up the "Shoot System"?
 - What organ makes up the "Root System"?
- ORGANISMS
 - o What are some examples of organisms?
 - What are some things that all organisms have in common?

Guided Practice:

Each student will make a graph (animal and plant), they will be given a sheet with pictures of cells, tissues, organs, organ systems, and organisms. Students will glue pictures into which column they belong in. Students may work with table partner.

Check for understanding:

- Teacher will ask for volunteers/call on students to provide answers what the slide is.
- Teacher will praise students for correct answers.
- Teacher will help students work through wrong answers to get the correct answer.
- Teacher will ask for clarification questions.

Independent Practice:

Students will create a chart, flow map, or pyramid of an organism of their choice with the correct organ systems, organs, tissues, and cell type. Students can work independently or with a partner. Creativity is encouraged.

Closure:

Students will answer closure statement in their science journal.

Choose one human organ system and write down 3-5 organs that are associated with this organ system. Write the organs and organ system down in your science journal and bring to class tomorrow to discuss.

**Students will write key vocabulary in their science journal as part of their personal dictionary. **

Re-Teach:

Students will be given a foldable that they can cut and color. Students will travel to different learning stations. These will include videos, manipulatives, and written paragraphs from the textbook for students to gather information and fill in foldable. Teacher will call on students once finished to ask students to share answers with the class.

Enrichment:

1. Students can read and look at class set of science magazines and find an article or picture that interests them. They can then come up with a creative way to present it to the class (ie: news cast, podcast, paper, PowerPoint, drawing).

2. Students can create a card or board game for animal and plant facts. Students have creative freedom, Once students complete game, the class can play in groups during enrichment time or for closure activity.

Accommodations:

- For students who have a hard time manipulating their hands, the guided practice pictures will be pre-cut, the student may ask partner to glue pictures in the spots they point to.
- For students who have a hard time concentrating during the lecture, they will be permitted to stand or select different seating during class. The teacher may also include breaks during the lecture to allow for refocus time.

Modifications:

• For students who have a traumatic brain injury the independent practice will be graded on a different grading scale. The student is not required to have as much detail as the rest of the class. They are also able to verbally explain what information they learned about the lecture to the teacher.