**Lesson Title: Cell Differentiation**

**Unit: Growth and Development (5)**

TEKS: (11)(b) The student will describe and explain cell differentiation in the development of organisms.
OBJECTIVES
The student shall be able to:

1. Define cell differentiation.
2. Explore terms related to cell differentiation.
3. Recognize structures formed within cell differentiation.

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

PPT: Cell Differentiation
WS: KWL Chart (may use during lab)
LM: Soda cans, straws, construction paper, Styrofoam cups, peppermints, jolly ranchers, markers, glue, sissors, etc.

TEACHING PROCEDURE

|  |  |
| --- | --- |
| Interest Approach/Anticipatory Set | Teacher Notes |
| Play brief review game with popcorn ball.Let students ask each other questions. TRANSITION – Today, we will be continuing cell differentiation. Have students participate in active lecture using question and answer.  | Short review gameActive lecture – finish cell differentiation |

|  |  |
| --- | --- |
| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
|  Allow time for students to complete KWL chart.After lecture, group students into 3-4 per group. Give lab activity and pass out materials along with instructions on what to do. Each group will be assigned an organ that they will have to develop with cells using different materials the teacher provides. If time allows, students will present their organs to the class.  | Begin lab activity by grouping students and passing out materials |

ENGAGEMENT

Students will be actively engaged through lecture by teacher asking questions throughout lecture. They will be engaged with the KWL chart as well (finishing the last column). Lastly, they will have to complete a lab activity using their own creativity and hands-on skills.

EVALUATION

The KWL chart along with the interest approach will be a form of evaluation. After the lab activity, we will review the topic by asking questions. Students may be asked to come up and write answers on the board to involve them even more.

ADDITIONAL MATERIALS

Videos used to create lesson and may show 1 during lesson:

<http://www.teachersdomain.org/asset/tdc02_vid_different/>

<http://www.teachersdomain.org/asset/lsps07_int_devdance/>

<http://www.pbs.org/wgbh/nova/miracle/media/2816_q_056_05.html> <Preferred video to show

Websites:

<http://www.teachersdomain.org/browse/?fq_hierarchy=k12.sci.life.stru.differentiation>

<http://www.biology-online.org/dictionary/Cell_differentiation>

©Texas Education Agency, 2011