**DI Lesson Planning Template**

**Teacher Name: Michelle Robertson**

**Subject Area: Science**

**Date: November 24, 2014**

**State Standards/Benchmarks:**

**4.4 The student will investigate and understand basic plant anatomy and life processes. Key concepts include:**

**a) the structures of typical plants and the function of each structure**

**b) processes and structures involved with plant reproduction**

**Lesson Essential Question:**

How do seed plants grow and reproduce?

**Time Required:** Approximately 2 weeks

**What will I differentiate?**

* **Content-** All students will be taught the same content, but with various types of teaching methods.
* **Process-** Videos, interactive notes, foldables, hands-on, and direct instruction will all be used to differentiate in the classroom. Students will be placed in groups that will change based on understanding of the material. Direct instruction will take place as necessary.
* **Product-** Differentiation is included in the final assessment with use of a choice board. Students can choose how they best can demonstrate their knowledge and understanding of pollination.

**How will I differentiate?**

* **For Readiness-** pretests will be used to determine what students already know and used to guide activities and groupings
* **Interest-** a choice board will be utilized and allow student choice of how they wish to demonstrate their understanding of pollination
* **Learning-** Students will work in small groups that change with each lesson
* **Affect/Learning Environment-** Students will work individually, in groups, and alongside the teacher for different parts of the lesson.
* **Combination**

**As a result of this lesson/unit students will:**

**Understand:**

How seed plants grow and reproduce?

**Know:**

Pollination, stamen, stigma, pistil, sepal, embryo, spore, and seed

**Do (Skills):**

analyze a common plant: identify the roots, stems, leaves, and flowers, and explain the function of each

create a model/diagram illustrating the parts of a flower and its reproductive processes

explain the model/diagram using the following terminology: pollination, stamen, stigma, pistil, sepal, embryo, spore, seed.

compare and contrast different ways plants are pollinated

**Pre-Assessment:**

There will be two pre-assessments used in my lesson, one for vocabulary and one for identification of the parts of the flower. The vocabulary pre-assessment will be a matching activity. For the parts of the flower, students will be given a diagram of a flower with cut/paste labels.

**Steps in the Lesson**:

1. Vocabulary pre-assessment (1 day)

2. Vocabulary Builder: (2days)

 a. Students scoring below a 80 on the pre-assessment will complete a vocabulary picture book. Students will write the word and definition, along with an illustration. Emergent readers will be used to guide this activity with the teacher.

 b. Students scoring above 80 on the pre-assessment will design a vocabulary quiz and answer key. Students will be required to create an assessment using multiple choice, fill in the blank, or true/false questions that includes all key vocabulary.

 c. All students will be assessed using a created quiz. More vocabulary practice will be introduced if needed.

3. Flower Part pre-assessment (1 day)

4. Make A Model: (1 day)

 a. Students scoring below a 80 on the pre-assessment will create a model of a flower using given labels and functions with the teacher.

 b. Students scoring above 80 on the pre-assessment will create a model of a flower using only the parts of the flower. They will create and design their own flowers and are required to label key parts and the function of each.

 c. All students will be assessed using a created quiz. More practice will be introduced if needed.

5. Interactive Notes (whole group 1 day)

 a. Pollination will be introduced with StudyJam video:

http://studyjams.scholastic.com/studyjams/jams/science/plants/flowers.htm

 b. Interactive Notes

 c. Magic School Goes to Seed

**Closure Activity/Wrap up:**

Students will be given Pollination Choice Boards. Directions will be given and assessment and due dates will be assigned. Students will be given time to work on choice board assignments in the computer lab following the written portion of the assessment. Additional time will also be given for students to work on their projects. Once completed, students will share their projects with the class demonstrating their knowledge of pollination. This presentation will be scored as part of the student’s post-assessment.

**Post-Assessment:**

 a. all students will complete a written, teacher created assessment

 b. all students will complete 1 project from Pollination Choice Board

**Integrated Instructional Technologies and Resources Utilized:** (*Include websites/tools used.)*

[**http://studyjams.scholastic.com/studyjams/jams/science/plants/flowers.htm**](http://studyjams.scholastic.com/studyjams/jams/science/plants/flowers.htm)

[**http://app.discoveryeducation.com**](http://app.discoveryeducation.com)

[**http://rubistar.4teachers.org/index.php**](http://rubistar.4teachers.org/index.php)

[**http://www.teacherspayteachers.com/**](http://www.teacherspayteachers.com/)

[**http://daretodifferentiate.wikispaces.com/Choice+Board**](http://daretodifferentiate.wikispaces.com/Choice%2BBoard)

**Weebly Link:** [**http://love2teach4thgrade.weebly.com/**](http://love2teach4thgrade.weebly.com/)