**Assign. #**

**Terrarium Project**

**Definition:** A terrarium is a closed glass or plastic container filled with small plants. The container should be clear or transparent. All closed containers should have transparent covers. The terrarium represents a small ecosystem. Some sample terrarium projects can be found on my science web site.

**Learner Outcome:**

* The student will be able to design and build a successful solution for a living terrarium that represents a miniature ecosystem which takes into account relevant ecological principals with particular criteria/constraints (Standard MS-ETS1-1 & Standard MS-ETS1-4).

**Directions:**

1. Design Blueprint:

* Draw a blueprint of the terrarium on a piece of paper. Label **all** parts of the terrarium and include the dimensions. Consider the types of plants, soil, and design among other factors that may or may not work together in your constructed ecosystem. Researching the plants will help with the outcome of the terrarium.

1. Material List:

* On the back side of the blueprint, make a material list. The material list should include everything that will be used to construct the project.
* The material list should also include all of the plants and/or seeds used in the project.
* The materials should not exceed $5.00; all receipts must be attached to the material list.
* All items that are not purchased should be listed on the material list as “home items”.
* If purchasing materials is an issue at home, see me for materials after school within the next week.

1. Building and Planting:

* Construct the proposed terrarium at home.
* You may plant seeds, transplant small plants, or use cuttings from plants using vegetative propagation.
* Remember that an ecosystem is a community of organisms. Consider spacing and the interactions of the different types of plants as well as the abiotic factors in your ecosystem.

1. Self-Evaluation:

* The terrarium will be graded 10 calendar days after the due date. The terrarium should continue to thrive and grow after being in the room for several days.
* After 9 days in the classroom, a self-evaluation of the success of the terrarium should be added to the project.
* You should write a paragraph regarding the success of the terrarium. How did the design work? What would you change? What would you keep the same? Are the plants thriving and healthy? Why or Why not?

# Grading of Project

Due: \_\_\_\_\_\_\_\_\_\_\_\_

1. Blueprint of Terrarium Design: **5 points**
   * Neatly drawn
   * Labeled thoroughly
2. Material List/Receipts: **5 points**

* All items are neatly listed with place of purchase
* Does not exceed $5.00
* Receipts are attached

1. Design/Esthetic Value: **5 points**

* How does the terrarium look?
* How much effort was put into building the project?

4. Success of Terrarium (10 days after due date): **5 points**

* Are the plants growing and maintaining a healthy state?

5. Self-Evaluation: **5 points**

* A neatly written evaluation needs to be included with the project.
* How did the design work? What would you keep the same? Are the plants thriving and healthy? What would you change?

# Actual Grade

1) Blueprint \_\_\_\_\_

2) Material List \_\_\_\_\_

3) Design \_\_\_\_\_

4) Success \_\_\_\_\_

5) Self-Evaluation \_\_\_\_\_

Total /25