Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Monocot and Dicot Seed Germination Lab

**Introduction:**

In this activity students will be examining the seed structure and development of two members of the Angiosperm group of plants.

**Objective:**

Students will distinguish between the structures of a monocot and dicot seed.

**Materials:**

5 Dicot seeds – such as bean seeds

5 Monocot seeds – such as corn seeds

2 Paper towels

Container or Ziploc bags

**Instructions:** to begin this lab, students need to germinate monocot and dicot seeds in a rag doll.

1. Get lab supplies listed above
2. Wet the paper towels and to lay the towels out on the desk top. Place the dicot and monocot seeds on to the paper towels in a line down the center. The paper towels should be damp but not so wet that water runs off. Once the seeds have been placed on the bottom towel, cover them with a top towel and then roll up the towels.
3. Place wrapped seeds in zip lock baggies.
4. Mark your packet with your name, date and seed type.
5. Check your seeds daily for germination. Record your observations on the Observation Chart listing any germination or changes to the seeds. Begin making observations 24 hours after making the rag dolls. Also, make observations of any differences between the monocots and dicots once they begin germinating.

**Observation Chart –**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Plant type | **Day 1** | **Day 2** | **Day 3** | **Day 4** | **Day 5** | **Day 6** | **Day 7** |
| **Monocot**  Plant Name: |  |  |  |  |  |  |  |
| **Dicot**  Plant Name: |  |  |  |  |  |  |  |

**Observation Results:**

**Questions:**

Which day did your first seed germinate? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Which day did your last seed germinate? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

How many seeds did not germinate? .

Make a sketch showing the differences between the germinated seed of a monocot and dicot?

**Monocot Dicot**

List the observable differences between the 2 seeds and seedlings:

**Monocot Dicot**