Specialty Seed Sorting

Grade Level: 4

Objective: After completing this activity, students will be more familiar with observation, data collection, and reasoning skills.

Suggested Reading Material:

<u>The Vegetables We Eat</u> by Gail Gibbons ISBN-13: 978-0-8234-2153-4 <u>Up, Down and Around</u> by Katherine Ayres ISBN 978-0-7636-4017-0 <u>Our Generous Garden</u> by Anne Nagro ISBN-13: 978-0-9793739-4-7



What You Will Need:

Eating Pumpkin Seeds Jack-O-Lantern Pumpkin Seeds Zucchini Seeds Eating Sunflower Seeds Mammoth Sunflower Seeds Evening Sun Sunflower Seeds

Activity Instructions:

- 1. Discuss why different seeds have certain characteristics. Why are some seeds round, some brown, some striped, etc.
- 2. Follow the dichotomous key to figure out what plant the seeds belong to.
- 3. Then have your students answer the questions on the following page.

Lesson Extender:

1. Give your students several different seeds packets and have them create their own dichotomous key.

What is a dichotomous key?

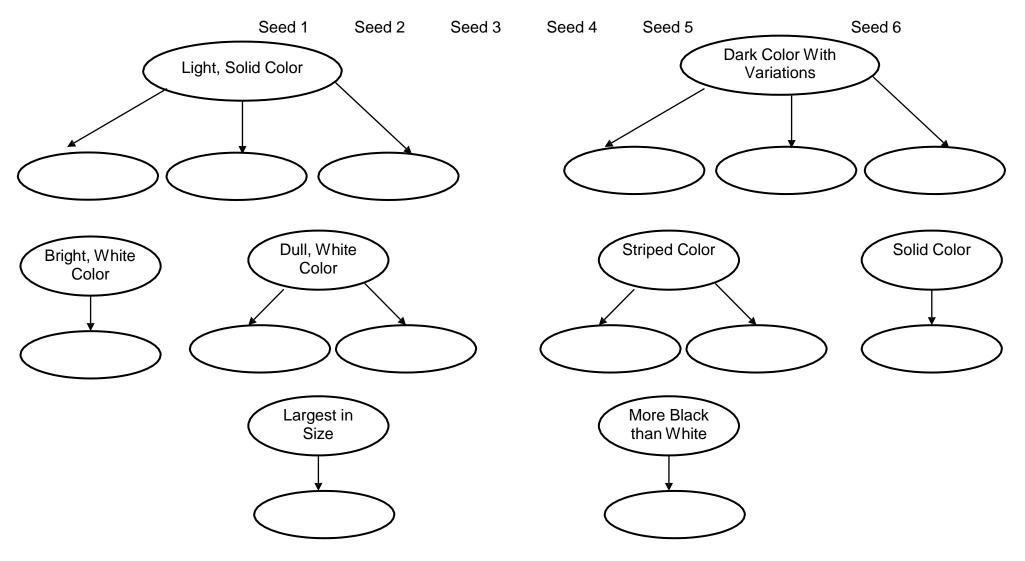
A dichotomous key is a tool that allows you to determine the identity of items in the natural world, such as trees, wildflowers, mammals, reptiles, rocks, and fish. The key consist of a series of choices that lead the user to the correct name of a given item. "Dichotomous" means "divided into two parts". Therefore, dichotomous keys always give two choices in each step.

Name:

Date:_____

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Directions: The purpose of this activity is to sort the seeds using their physical characteristics. Write the number of the seed in the correct ovals, then answer the questions on the following page.



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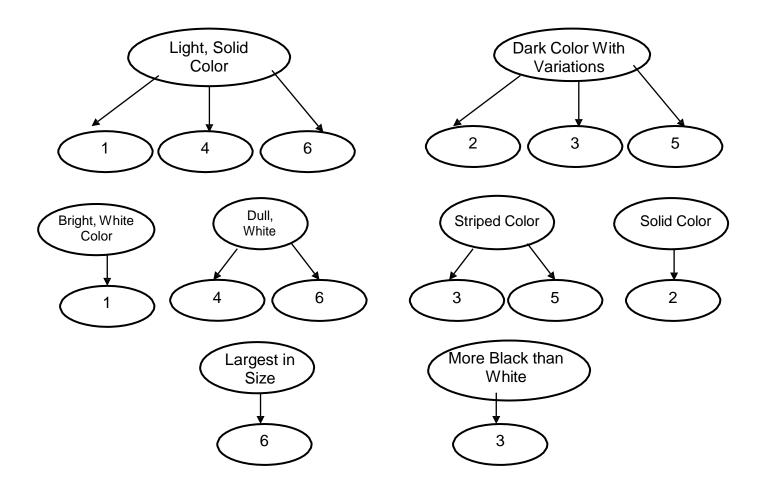
Directions: Use the information below and the information from the previous page to answer the following questions.

- Seed 1: Eating Pumpkin Seed
- Seed 2: Evening Sun Sunflower Seed
- Seed 3: Eating Sunflower Seed
- Seed 4: Zucchini Seed
- Seed 5: Mammoth Sunflower Seed
- Seed 6: Jack-O-Lantern Pumpkin Seed
- 1. What is the name of the seed that is striped and more black in color than white?
- 2. Seeds 1, 4, and 6 all belong to which of the following families:
 - A. Asteraceae or Compositae (aster, daisy or sunflower)
 - B. *Cucurbitaceae* (gourds or squash)
 - C. Brassicaceae (broccoli)
- 3. How do zucchini seeds differ from jack-o-lantern pumpkin seeds?

- 4. If I planted my zucchini seeds on May 5th and harvested them on June 24th, how many days did they take to mature?
- 5. Jack-O-Lantern seeds germinate in 7 to 14 days and take 100 days to mature. If you wanted to pick a Jack-O-Lantern pumpkin on October 15th, what day would you need to plant your seed?

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ANSWER KEY



- 1. Eating Sunflower Seed
- 2. B
- 3. Zucchini seeds are smaller in size
- 4. 50 days
- 5. July 7