"The Same But Different: Creating Snowflakes"

Level: 1st Grade

Time: 1 class period (about 40 min)

Core Standards: CCSS.ELA-Literacy.RL.1.1, CCSS.ELA-Literacy.RL.1.3, CCSS.ELA-Literacy.RL.1.7, CCSS.Math.Content.1.G.A.3

Overview:

This lesson teaches students about winter weather in colder climates with an emphasis on the unique aspects of snowflakes. Students will study individual snowflakes—noting the differences and similarities between them. Through an art activity of creating their own snowflakes, students will understand how each snowflake can have similarities and still be unique. Students will extend this lesson to their own lives, too. This lesson incorporates science/weather, art, and math skills.

Concept: Understand how objects and people can have similar traits but still be unique and special.

Objectives:

- Students will learn that snow is made up of ice crystals, and that each snowflake has six sides.
- Students will understand that even though all snowflakes have six sides, no two snowflakes look alike.
- Students will explain that even though they have similar traits as their friends, siblings or other family members, they are unique and special.

Materials

- Images of magnified snowflakes (printed copies or online images of many different snowflake crystals)
- Construction paper cut into smallish squares (any color)
- Scissors
- Crayons, color pencils, markers, glue and glitter
- The Casey & Friends book, Casey's Bright Red Christmas*

Procedure:

Introduction: Read *Casey's Bright Red Christmas* to the class. After reading the story, ask students if they remember what Tillus said the weather was going to be like for the day. (Allow for answers and reread p. 2 if necessary.) Ask students why they think it's important for farmers to know the weather report. (Allow for answers.) Explain to students that the weather affects how farmers work. They need to know how hot or cold it will be so they dress properly. How does Casey dress when she is outside in winter? (Look at p. 6 in the book, where Casey is working

outside.) Explain that winter weather is very cold and snowy in some places. That's because snow is made up of tiny ice crystals!

Learning Activity: Show students the images of magnified snowflakes. Ask students what is the same about all the snowflakes. If no one mentions it, point out that each crystal has 6-sides. Now ask students what is different about all the snowflakes. Point out to students that even though all the snowflakes have six sides, none of them look alike—just like each one of them. Although people may have the same hair color, eye color, freckles, etc. as their friends or relatives, they are all unique and special. Now each student will create his or her own unique snowflakes.

- 1. Give each student 2-3 pieces of construction paper.
- 2. Show students how to fold the paper in half and in half again so it is folded in quarters.
- 3. Tell students to cut shapes out of the folded paper. Show them on a sample paper if necessary.
- 4. Once the students feel they are finished, tell them to open the paper up and look at the snowflake.
- 5. Ask students what they think will happen if they fold the paper differently.
- 6. Now ask students to fold the next paper in a different way from the first sheet.
- 7. Repeat steps 3 and 4.
- 8. If time allows, ask students to make one more snowflake.
- Decorate the snowflakes.

Additional Learning Opportunity: If you have access to magnifying glasses and snow, have students go outside and look at the snow with a magnifying glass. Ask students to draw pictures of the snowflakes they saw through the magnifying glass.

*If you don't have *Casey's Bright Red Christmas*, you can use any winter themed book that includes snow in the pictures/story. Ask students how they should dress when the weather is cold and snowy, and discuss how snow is another form of water made up of ice crystals. Continue with the learning activity.