Lesson Plan: Weather Wonders – Exploring the Science of Rain, Snow, and Thunderstorms

Age Group: 5-year-old children Plus

Subject: Weather Science **Duration:** 30–40 minutes

Objectives:

- To introduce children to different types of weather, including rain, snow, and thunderstorms.
- To encourage curiosity about how weather works and how it impacts the environment.
- To help children understand basic weather science and safety practices during thunderstorms.

Materials Needed:

- Video From DiscoverLifeSkills.com: Weather Wonders: Exploring the Science of Rain, Snow, and Thunderstorms
- Weather-themed flashcards or images (rain, snow, thunderstorm, clouds, lightning)
- Cotton balls (for crafting clouds), glue, crayons, and blue, white, and gray construction paper
- Optional: Toy weather instruments (thermometer, rain gauge)
- Books about weather (simple picture books about the weather)

Lesson Outline:

1. Introduction (5 minutes)

- **Start with a question:** "What kind of weather do you like best? Have you ever seen a big rainstorm or snow outside?"
- Explain: "Today we're going to learn about the weather—rain, snow, and even thunderstorms! Have you ever wondered why it rains or snows? We're going to explore the science behind it all."

2. Watch the Video (7-10 minutes)

- Show the Weather Wonders video.
- Encourage children to watch for their favorite type of weather and listen for the sounds of rain, snow, and thunderstorms.

3. Discussion (5 minutes)

• Ask follow-up questions:

- "What happens when it rains? Why do we need rain?" (Plants grow, fills rivers, etc.)
- "What does snow look like when it falls? Can you describe it?"
- "What is the sound you hear during a thunderstorm?" (Thunder)
- "Why do we need to stay safe indoors during a thunderstorm?"

4. Hands-on Activity: Create Your Own Weather Scene (10-15 minutes)

Instructions:

- Hand out construction paper, cotton balls, glue, and crayons. Ask the children to
 pick a type of weather they liked from the video—rain, snow, or thunderstorms.
- Help them create a weather scene by using cotton balls for clouds, crayons to draw raindrops, snowflakes, or lightning bolts.
- Guide them in crafting the weather scene, and ask them to explain what type of weather they are making.

5. Optional Weather Experiment (10 minutes)

• Rain in a Jar Experiment:

- Fill a clear jar with water (representing the air), place shaving cream on top (as the clouds), and add drops of blue food coloring (as the rain). Watch how the "rain" falls when the clouds get too heavy.
- Ask the children, "What did we see in the jar? Why did the rain fall?"

6. Conclusion and Reflection (5 minutes)

• Wrap up:

- Review the three weather types (rain, snow, thunderstorms) and how each one forms.
- Ask the children what they learned about how weather works.
- End with a fun fact: "Did you know that no two snowflakes are exactly alike?"

Extension Ideas for Continued Learning:

1. Weather Role Play:

 Play a game where the children act out different weather patterns. For example, they can pretend to be snowflakes falling or rain droplets splashing on the ground.

2. Storytime:

 Read a simple picture book about weather, such as "Cloudy with a Chance of Meatballs" by Judi Barrett.

3. Weather Sounds Matching Game:

 Play recorded sounds of different weather (rain, thunder, wind, etc.), and have the children guess which type of weather it is.

Learning Goals for 5-Year-Olds:

- Recognize different types of weather (rain, snow, thunderstorms).
- Understand the basic science behind how rain, snow, and thunderstorms form.
- Learn safety rules for thunderstorms (stay indoors, avoid tall trees).
- Develop fine motor skills through crafting and drawing.

This lesson plan combines storytelling, sensory activities, and hands-on crafting to engage children in learning about weather phenomena, encouraging both curiosity and creativity in the classroom!