Crying Out Cloud

Essential Question(s):
What are the different types of clouds?
How are clouds connected to weather?

Background Information:
In 1804, an Englishman named Luke Howard made meteorological sense of the complex and ever-changing sky by identifying four basic cloud types. These clouds have their own special shape and appearance and come with their own type of weather. There is cumulus (Latin for “heap” or “pile” these clouds appear on sunny or just partly cloudy days and are typically the clouds that you might see different shapes in), stratus (Latin for “to spread out” these clouds bring fog and light rain), nimbus (Latin for “rain”), and cirrus (Latin for “curl” these clouds appear on days with clear, sunny weather). Today, meteorologists still use Howard’s classification system with a few modifications. There are many other types of clouds, such as cirrostratus and stratocumulus, where the characteristics of the basic cloud types are combined. When looking at the sky, you can also see more than one cloud type at one time. Clouds can be valuable tools when looking for weather signs.

Procedure:
A. Background:
   1. Leader will show the children the graphic on the next page and explain the different types of clouds to the children
   2. Allow them to note the similarities and differences between all the clouds

B. Main Activity:
   1. Find a place where they can lay down or sit and look at the clouds in the sky.
   2. Let children try to match the clouds that they see in the sky to the pictures below. They can also discuss the different shapes that they see the clouds making or the rate of movement they see from the clouds.
   3. If there are not any clouds in the sky, let the children look for things around the garden that resemble the cloud pictures.

C. Craft: 4 Kinds of Clouds

Discussion/Assessment:
- What types of clouds appear with sunny weather? (Cumulus and Cirrus)
- What types of clouds tell you that it is going to or could rain? (Stratus and Cumulonimbus)
- What do different types of clouds look like?

Take Home Message: Clouds can be a fun way to observe weather changes.
Cloud spotting guide

High level
above 6,000 m
- Cirrus
- Cirrocumulus

Mid level
2,000 to 6,000 m
- Cirrostratus
- Altocumulus
- Altostratus
- Stratocumulus
- Cumulonimbus
- Cumulus
- Nimbostratus

Low level
0 to 2,000 m
- Stratus
4 OF A KIND CLOUD CRAFT

1. Get a sheet of blue paper and draw lines that divide the paper into four squares
2. Grab some cotton balls and create four different kinds of clouds by stretching, tearing, and shaping the cotton balls
3. Glue your cotton ball clouds onto your blue sky paper
4. Label your clouds