

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Fog & Lightning

Theme: Earth/Space Science

Unit Number: 1 **Unit Title:** Weather and the Seasons

Performance Standard(s) Covered (enter code):

S1CS3

S1CS5

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Fog, lightning, types of weather, atmosphere

Learning Activity (Description in Steps)

Abstract(limit 100 characters): This activity helps the students to understand how fog forms and how lightening is developed.

Details: Fog Activity: Fill up the jar completely with hot water and let it sit for about a minute.

Pour out almost all the water, and leave about one inch in the jar. Put the strainer over the top of the jar and place a few ice cubes in the strainer. In a few seconds fog will be created. Explain to the students that the cold air from the ice cubes collides with the warm, moist air in the jar. This causes the water to condense and form fog.

Lightening in your mouth activity: Go to a dark room (maybe the bathroom) and stand in front of the mirror. Wait a few minutes until your eyes get used to the darkness. Put a wintergreen or peppermint lifesaver in your mouth. While keeping your mouth open, break the lifesaver up with your teeth and look for sparks. If you do it right, you should see flashes of light. Tell the students that when you break the lifesaver apart, you are breaking apart the sugars inside the candy. The sugars release little electrical charges in the air. When the two opposite charges meet, they react in the tiny spark that you can see.

Materials Needed (Type and Quantity):

Fog activity:

Glass jar
Strainer
Water
Ice cubes
Lightning activity:
Wintergreen or peppermint lifesavers
Mirror
Dark room

Notes and Tips (suggested changes, alternative methods, cautions):

For the fog activity you need to have hot water ready to use before you start. You need to make sure that none of the students try to touch or handle the hot water with the fog activity. Also be careful about students running around the room with the lifesavers in their mouth, so they will not choke.

Sources/References:

- 1) <http://www.weatherwizkids.com/WxExperiments.htm>**
- 2)**
- 3)**