



Camp Fire
Central Puget Sound

AT HOME WITH CAMP FIRE

CLOUD IN A JAR

Simple Weather in Your Kitchen

Time: 15-30 Minutes

Materials:

- Glass Jar with a Lid (think mason jar or old sauce jar)
- 1 cup hot boiling water
- food coloring (optional to see cloud better)
- Aerosol Hairspray
- 3-5 ice cubes

*Camp Fire Central Puget Sound
Community Programs*

STEP BY STEP GUIDE

KID FRIENDLY PURPOSE: WE ARE GOING TO MAKE OUR OWN CLOUD AND TALK ABOUT HOW THEY FORM!

BEFORE WE BEGIN: ASK YOUR YOUTH HOW THEY THINK A CLOUD FORMS? (ANSWER BELOW)

1. BOIL 1 CUP OF WATER - LET SIT FOR 3-5 MINUTES
2. OPTIONAL- ADD FOOD COLORING TO THE BOILED WATER TO SEE THE CLOUD BETTER
3. POUR HOT WATER INTO GLASS CONTAINER
4. QUICKLY SPRAY HAIRSPRAY INTO JAR AND PLACE LID ON JAR UPSIDE DOWN.
5. PLACE 3-5 ICE CUBES ON TOP OF LID
6. OBSERVE AS A CLOUD FORMS!

SCIENCE BEHIND IT: Clouds form when water vapor (gas) rises into the atmosphere, then cools and condenses (liquid) onto a small particle like dust or dirt.

OUR EXPERIMENT: The warm water in the jar causes the air in the jar to heat up, this warm air evaporates the water (water vapor). This water vapor rises to the top of the jar where it meets colder air caused by the ice on the lid. The water vapor condenses because of the cold air and attaches to the hairspray, which is acting like our dust particle, to cause a cloud to form!