CAMP FIRE AT HOME ACTIVITY

Water Condensation

Why does a cup with ice water get condensation on the outside? Find out!

TIME: 15 MINUTES

MATERIALS:

- **WATER**
- **ICE**
- **2 CLEAR CUPS**
- **LARGE ZIPLOC BAG (TO FIT ONE CUP IN AND CLOSE)**
- **2 NAPKINS OR PAPER TOWELS**

Step by Step Guide

BEFORE YOU BEING: ASK YOUR PARTICIPANT WHY THEY THINK A CUP WITH ICE WATER GETS CONDENSATION ON THE OUTSIDE?

1. PUT ICE CUBES IN TWO CLEAR CUPS UNTIL 1/2 FULL
2. POUR COLD WATER INTO BOTH CUPS UNTIL 3/4 FULL
3. PLACE ONE CUP INTO ZIPLOC BAG, GET MOST OF THE AIR OUT OF THE BAG AND ZIP BAG SHUT
4. DO 25 JUMPING JACKS AS YOU LET THE WATER SIT
5. USE NAPKIN TO WIPE OUTSIDE OF CUP NOT IN ZIPLOC BAG
6. SEE AND FELL HOW WET IT IS
7. TAKE THE CUP OUT OF THE ZIPLOC BAG AND DO THE SAME AS STEPS 5&6
8. COMPARE THE TWO NAPKINS

WHAT DID YOU NOTICE? WHY DID THE CUP IN THE ZIPLOC NOT HAVE AS MUCH CONDENSATION?

SCIENCE BEHIND IT: MOST AIR HAS WATER MOLECULES THAT MAKE IT UP. WHEN THE WATER MOLECULES IN THE AIR TOUCH THE COLD CUP, THEY SLOW DOWN, AND CONDENSE INTO WATER DROPLETS.

OUR EXPERIMENT: SINCE WE HAD ONE CUP IN A BAG WITH MOST THE AIR SUCKED OUT OF IT, THERE WAS NOT ENOUGH WATER MOLECULES IN THE AIR TO CONDENSE ON THE CUP, MAKING IT HAVE LESS CONDENSATION THAN THE OTHER CUP