

Shady Structures At Home Science Project

Dear Families,

As a final topic for this school year, we will investigate the effect the sun has on different materials. Students will take on the role of an engineer and design a structure to slow the melting of ice. Below is a summary of the project. I hope that you enjoy exploring together!

Project Overview

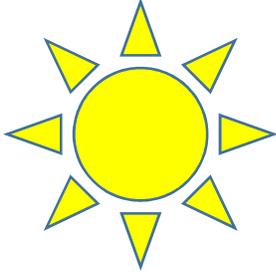
Step 1: On a sunny day (mid-late afternoon), go on a scavenger hunt. You are looking for things that feel warm and things that do not feel warm outside. Draw/write your discoveries on the handout. Have your child try to explain why some things are warmer than others - help them out.

*****To prepare for the next lessons, make ice cubes. Try to get them to all be about the same size.**

Step 2: On a sunny day, see how long it takes the sun to melt an ice cube. Put an ice cube in a Ziploc baggie or see-through cup and find a sunny spot to place it outside. Time how long it takes (in minutes) for the ice cube to completely melt. Find some shade and repeat the experiment. Discuss the results. We want students to know two things: 1) ice melts more quickly in the sun than in the shade and 2) shade happens when something blocks the sun.

Step 3: On a sunny day, design a structure that makes shade for an ice cube. You can use any materials you have readily available. Students will design, build and test out their structure to see if it can make the ice cube melt more slowly than the one that was in the sun from day 2.

OUTDOOR SCAVENGER HUNT



Wow, it is hot outside today. I wonder if everything outside feels hot?

Let's explore! Draw or write what you find out.

Things that feel warm	Things that do not feel warm