Paper Plate Sundial

About:
At Camp Whitcomb/Mason, we have a sundial in our Garden that helps us tell time using the sun and shadows. Now you get to do this fun activity at home!

Objective:
Using Social Emotional Development informed practices to make a sundial and learn how to use the sun to track time.

Age: 12-18
Expected time: 30 minutes

Making Your Sundial

Gather supplies
- Paper Plate
- Sharpened Pencil
- Permanent Marker
- Watch/Clock
- Tape

Pre-Questions to Think About
- Why do you think the sun was used to track time before clocks were invented?
- How could this be used during camping?
- Why is it important to do this on a sunny day?

Make Your Sundial
- Start this project before noon on a sunny day.
- Take your pencil and poke a hole through the center of the plate.
- Write the number 12 at the top of the plate with a crayon/marker.
- Draw a straight line from the number 12 to the center of the plate.
- Once it is noon, take the plate and straw outside, and place the plate on the ground and poke the straw through the center.
- Now turn the plate so the shadow of the straw runs along the line the line to the number 12.
- Fasten the plate on the ground with some push pins and check back with the sun dial an hour later.

Wrap Up:
- What time do you think the sun dial will show when you check on it? Is it correct?
- Why do you think sun dials were used before we had clocks?
- What did you learn?