

Sundial Experiment

Materials:

- 🚖 Straight stick about two feet long
- 🚖 small rocks or small seashells
- 🚖 a watch
- 📌 chalk (optional)
- 🚖 Sand (optional)
- 📌 Bucket (optional)

Instructions:

Prediction – what do you think will happen?

- Find a sunny spot and push the stick vertically straight into the grass or earth. If your backyard doesn't have any grass or earth, fill a small bucket with sand and place your stick into the bucket.
- Start in the morning when the sun is up. At 7:00 am use a small rock or seashell to mark where the shadow of your stick falls. Come back at 8:00am, 9:00am, 10:00am, and so on until there is no more daylight in the day. You may want to mark your pebbles with the time they were placed using chalk.
- 3. By the end of the day your sundial will be complete.

The next day, can you use it to tell the time?

How it Works:

The sun's light will make your long stick cast a shadow. The shadow will change it's angle depending how the sun's light is hitting the stick because our earth is constantly rotating and revolving around the sun.