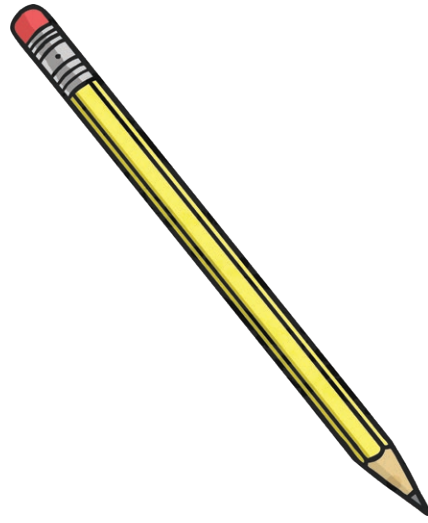


Sundial Experiment

You Will Need:

- paper or polystyrene plates
- sharp pencil
- marker
- clock
- a sunny and not too windy day
- ruler
- adhesive putty, modeling clay or sticky tape



Method:

1. Find a spot outdoors that is not sheltered and where the sun is shining brightly.
2. Find the center of your plate and push the sharp end of the pencil into it so that it stands upright.
3. Secure the pencil in place with some adhesive putty, modeling clay or sticky tape.
4. Place the plate outside in your selected spot and on each hour look at where the shadow of your pencil falls.
5. With your marker, draw the shadow of the pencil and write the number of the hour.
6. Repeat until the end of the school day.
7. The next day test out your sundial and make sure the shadows fall on the correct time.

Questions:

Did you find all the shadows the same length? Why or why not?

How are shadows created?

What makes this sundial work?

How is your sundial like the first sundials?
