

LESSON PLAN 2 – Sun Dial

Year Levels - K to 7



How to make a sundial

Junior Primary from web site:

http://www.sciencekidsathome.com/science_experiments/sundial-1.html

Upper Primary - Search various ways to make a sundial by internet or school library.

Eg: <http://www.rmg.co.uk/make-your-own/sundial>

Curriculum links

- Earth's rotation on its axis causes regular changes, including night and day (ACSSU048)
- Science involves making predictions and describing patterns and relationships (ACSHE061)
- With guidance, plan appropriate investigation methods to answer questions or solve problems (AC SIS103)

Materials:

- stick
- rocks or chalk
- 1 cup of sand
- watch or clock

Activity

1. Find a sunny spot on the lawn or on a sidewalk.
 2. Put the stick in the ground or in a cup of sand to hold the stick upright on cement.
 3. Throughout the day, place a rock, or mark with chalk for each hour indicating where the shadow falls at that time. Depending on your time, you may have to place rocks over a couple of days before your sundial is complete. In the picture above, the stones are used to mark each hour from 7am to 7pm. The photo was taken at 9:15 in the morning.
- Note:** In the beginning, you may find it hard to be very precise. With a bit of practice, you should be able to tell time to the nearest 15 minutes and maybe even more closely. It's about 12:30 am in the picture above.

Alternative

Use chalk and a ruler to draw in the shadow lines, instead of placing rocks on the hour. You can print out a sundial from the internet.

Plenary

Discuss findings –accuracy, direction of shadow movement, difficulties. Write a report.