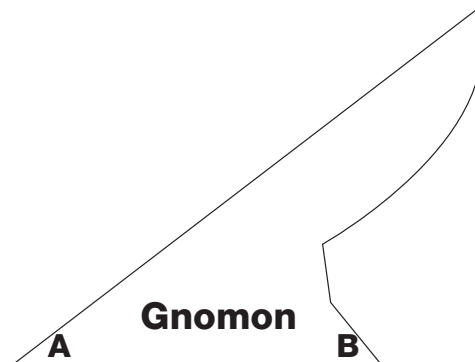
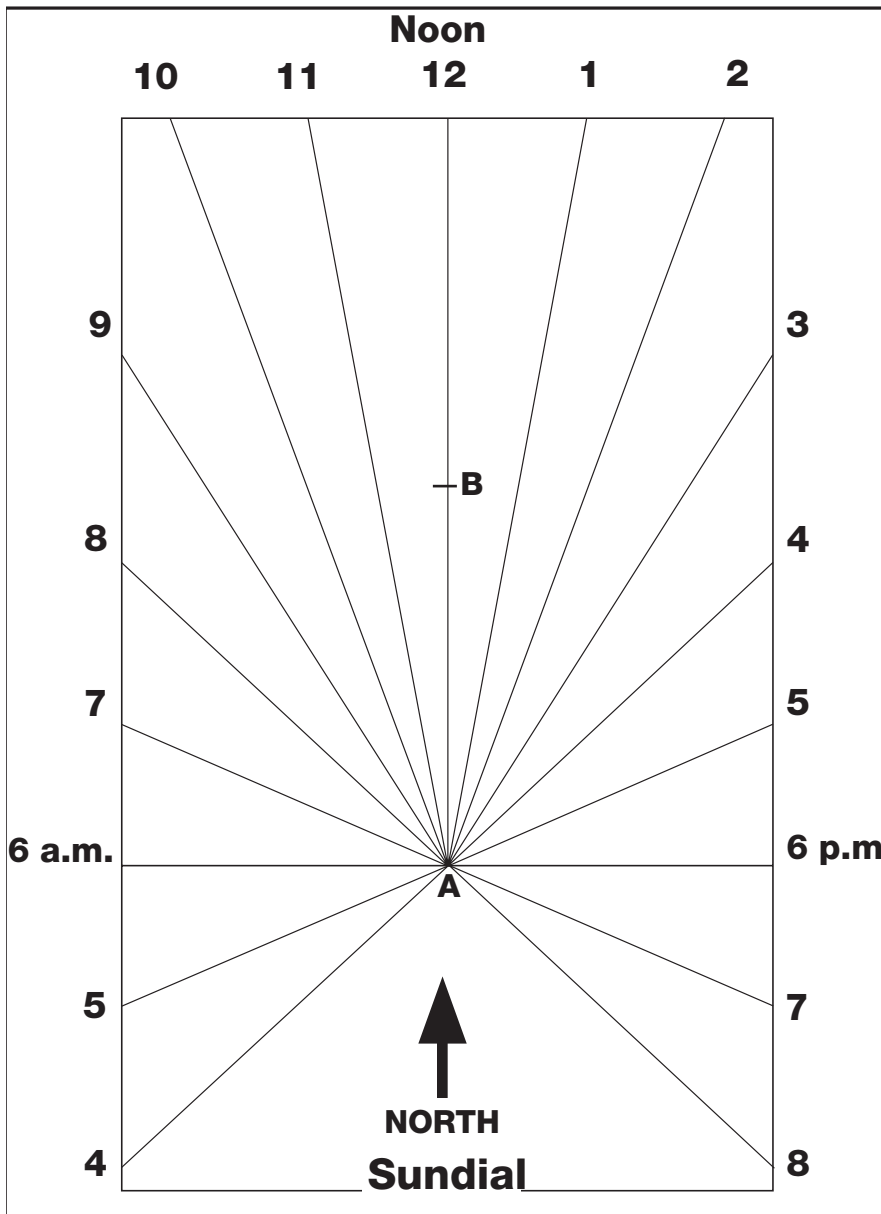


HOME/SCHOOL CONNECTION

Investigation 1: The Sun



Sundial Pattern

This sundial will work best at latitude 38° north, the latitude of San Francisco Bay. But the gnomon can be easily modified to fit your area. Find the latitude of your hometown. Then modify angle A on the gnomon to measure that angle.

Materials

- Cardboard
- 1 Scissors
- 1 Protractor
- Glue
- Tape

Directions

1. Glue the pattern to a piece of cardboard. Let it dry.
2. Cut out the sundial and the gnomon carefully.
3. Tape the gnomon to the sundial on the 12:00 line, matching angles A and B.
4. Place the sundial outside or in a sunny window. It must be level. Point the 12:00 line and the gnomon directly north. Adjust the sundial by comparing the time you see on the dial with the time on a clock and turning the sundial until the times match. The sundial will now tell time accurately.

NOTE: Sundials measure local apparent time, which depends on the position of the Sun in the sky. You will need to adjust the time you read on the sundial to get standard time. Check a reference to get the correction factors required to make this adjustment.