## Sundial Instructions

People first started using sundials - one of the oldest known instruments for measuring time - about 3000 years ago. A sundial tells time by measuring the angle of the shadows cast by the sun. Though there are many types of sundials, they all work on the same principle. All sundials have an upright portion, called a gnomon (NO-mon), and a base. When sunlight hits the gnomon, it casts a shadow onto the base. The shadow will fall on or between the different lines and mark the time of day. No matter where the sundial is, it always gives a local time, because sundials measure the position of the sun relative to themselves.

1. Center the cardboard template on the sundial base. Use a marker to apply hour markings ( Fig. 1 ), then return template to the supply table for others to use.
2. Apply numbers (I, II,III, IV etc) to the sundial base to indicate the time of day.
3. Apply glue to the slot.
4. Insert triangle into slot ( Fig. 2 ) and allow glue to dry.



Fig. 2

Fig. 1
5. Place sundial on a flat surface in direct sunlight.
6. Turn the dial so that 12 noon points directly North.
7. The shadow of pointer will move around the dial as an hour hand.
8. You can apply a weatherproof sealer at home to make this an outdoor garden sundial.

