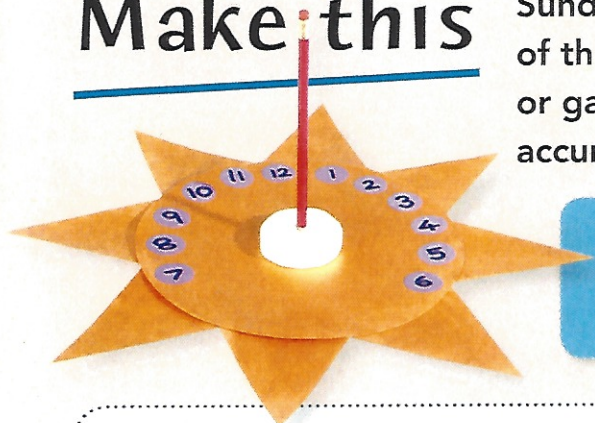
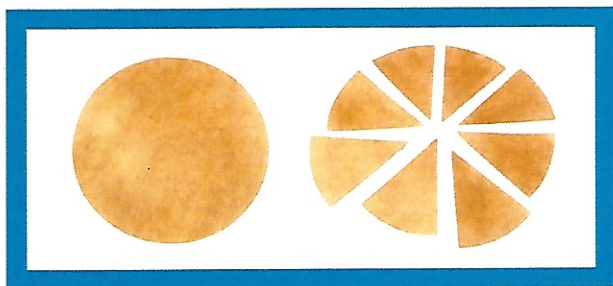


Make this

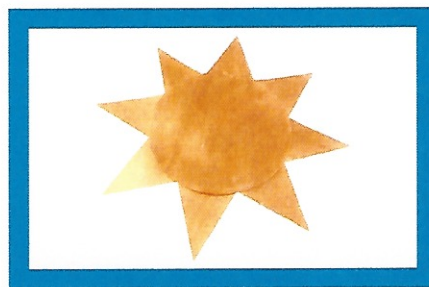


Sundials are a way to tell the time from the position of the Sun. You could make a sundial for your school or garden. But remember, most sundials aren't that accurate; they can only tell you roughly what time it is.

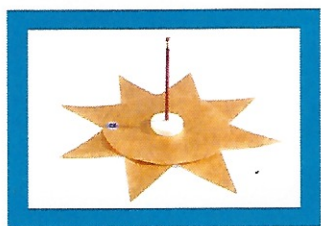
What else can shadows cast by the Sun tell you? What time of day will it be if the shadows are long? What does a short shadow tell you about the height of the Sun in the sky?



1 Cut two circles of gold card, about the size of a plate. Cut one of the circles in half, then into quarters. Cut each quarter in half so you have eight pieces, all the same size and shape.

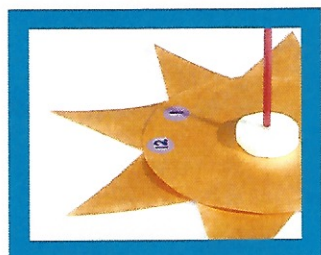


2 Stick each of the eight pieces onto the back of the other gold circle. They should form a pattern like the one shown.



3 Press some plasticine onto the middle of the circle and push a pencil into it. On a sunny day at exactly 12 o'clock put the sundial in the sunshine.

Write the number 12 on a sticker and put the sticker exactly where the shadow of the pencil falls. Make sure you don't move the sundial at all.



4 Leave your sundial outside. Every hour add another sticker where the shadow falls to mark the time. At the end of the day you may have to guess where the rest of the stickers should go.

Or, if you can, you could come back in the morning to finish the rest of them. (Note: you may find that your numbers are not spaced evenly around the dial – this is completely normal!)