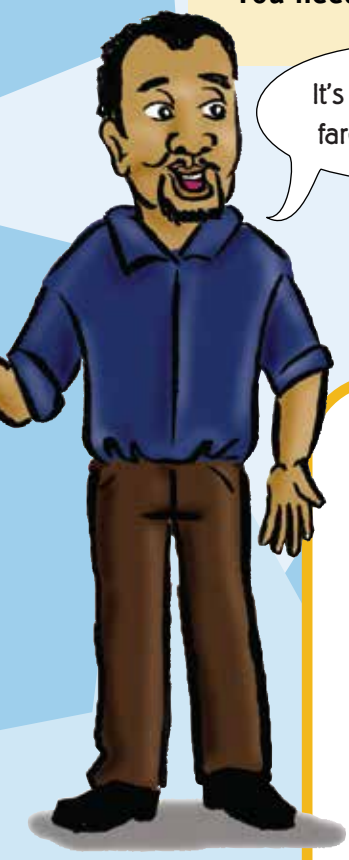
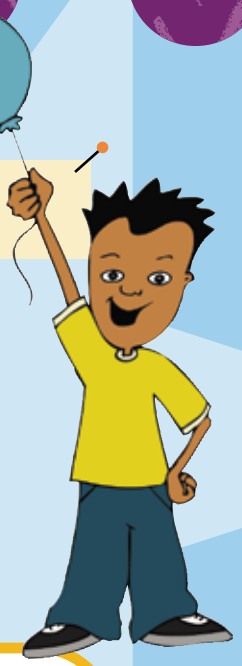
Farewell Party

You need ☑ scissors ☑ cardboard ☑ a protractor ☑ crayons or felt-tip pens





Activity

Mika, Robert, and Melissa will start at their new schools at the beginning of next term. On the last day of term, the class makes a big circular cake. They ice the top in 3 sectors, each with one of the leavers' names on it.

1. Draw a bird's-eye view of the cake and "ice" it so that the 3 parts are each exactly the same size.
2. a. What fraction of the cake has Melissa's name on it?
   b. What fraction of the cake has the boys' names on it?
3. There are 360 degrees in a full turn.
   a. How many degrees are in the sector of the cake with Melissa's name on it?
   b. How many degrees are in the sector of the cake with the boys' names on it?
4. There are 24 students in the class, so Mr Rohe cuts the cake into 24 equal pieces.
   a. What is the angle size of each piece of cake?
   b. The radius of the cake is 15 centimetres. Make a cardboard cut-out that shows the size and shape of the piece each person would receive.
5. a. How many cuts are needed to divide the cake into these 24 pieces?
   b. Can you find a way of dividing it into 24 equal pieces using fewer cuts?