## Design a Logo

You need: a compass, a ruler

As part of Maths Week, your school is having a competition to design a logo. The winning design will be used on maths worksheets, tests, and newsletters and on the wall at the interclass teams' quiz.

ACTIVITY

Each entry must use at least 2 of the 3 transformations: translation, reflection, and rotation.

1. Design a logo that could be entered into the competition. It should be 20 centimetres high, 16 centimetres wide, and in colour.



- 2. An overhead transparency (OHT) will be made from the logo so that it can be projected onto the stage backdrop in the hall during the teams' quiz. When projected, the logo needs to be 4 metres high.
  - **a.** What is the scale factor of this enlargement?
  - **b.** What is the width of the projected logo?
- 3. When used on printed material, the logo will be 5 centimetres by 4 centimetres. What is the scale factor of this enlargement?
- 4. Draw the reduced-sized logo. Compare its area with that of the original.