Castle Construction

You need: card, scissors, a ruler, glue, felt pens or brushes and paint, a drawing compass, a classmate

1. Follow the instructions below to make a model of a mediaeval castle. When finished, it will have:

7 WALL SECTIONS

2 SQUARE TOWERS WITH ROOFS
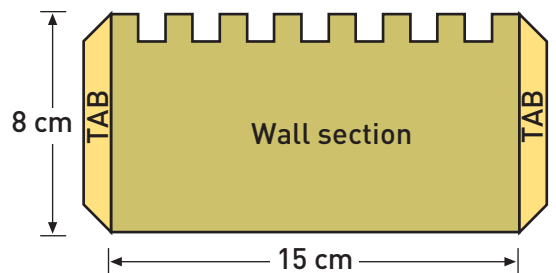
4 CIRCULAR TOWERS WITH ROOFS

1 GREAT ROOM WITH A ROOF

STEP ONE

Make 7 wall sections using these dimensions. Use your own measurements for the battlements.
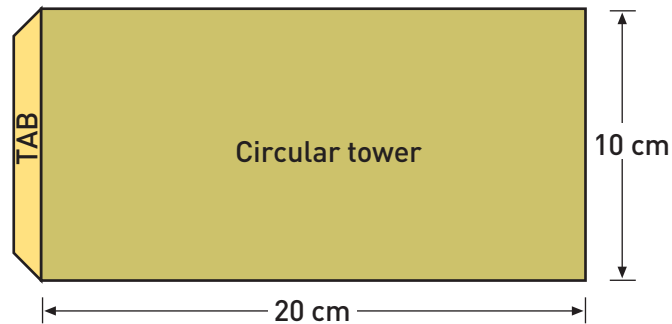
8 cm   TAB   Wall section   TAB

15 cm

STEP TWO

Make 2 square towers using these dimensions. Fold each tower and glue the edges. Add a roof to each, gluing it in place a centimetre below the top.
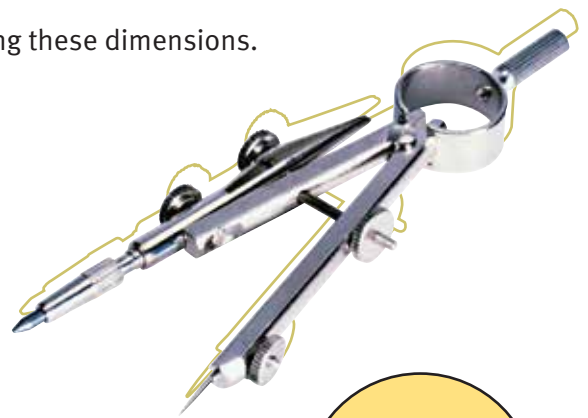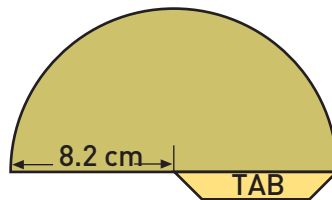
TAB   Square tower   11 cm

20 cm
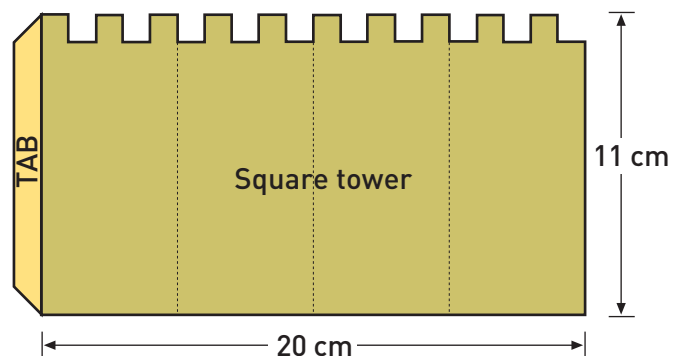
Make 4 circular towers using these dimensions.

TAB

Circular tower

10 cm

20 cm

Make a roof for each circular tower, using these dimensions.

8.2 cm

TAB

Make the rectangular Great Room.
It is 12 centimetres long, 6 centimetres wide,
and 9 centimetres high. Add tabs where needed.
Make and fit a roof.

**AREA OF
A CIRCLE
= πr^2**

2. Using centimetres (cm) and centimetres squared (cm^2) as your units, what is:
   a. the floor area of each square tower?
   b. the floor area of the Great Room?
   c. the diameter of each circular tower?
   d. the floor area of each circular tower?
   e. the circumference of the roof of each tower
      when glued?

3. Decorate the walls, drawing windows and a drawbridge.

4. Fold the tabs on the wall sections and glue these
   to the towers and the Great Room. From above,
   your completed castle should look like this.

5. a. Using centimetres squared as the unit, estimate
      the area of the inner space enclosed by the castle.
   b. Discuss with a classmate what the scale length
      of 1 centimetre might represent in a real castle.

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