**Construction and Loci**

Pre-Intervention Assessment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Question** | **Objective** | **RAG** |
| 1 | Draw and measure bearings |  |
| 2 | Draw to scale |  |
| 3 | Construct triangles accurately |  |
| 4 | Solve loci problems |   |

**1.** The diagram shows the positions of two villages, Beckhampton (*B*) and West Kennett (*W*).

Scale: 4 cm represents 1 km.

The village, Avebury (*A*), is on a bearing of 038° from Beckhampton.

On the diagram, *A* is 6 cm from *B*.

On the diagram, mark *A* with a cross (×).
Label the cross *A*.

**2.** Here is a scale drawing of the plan of a room.



Work out the total length around the edge of the room.
Give your answer in metres.

**3.** In the space below, use a ruler and compasses to construct an equilateral triangle with sides of length 5 cm.
You must show all your construction lines.

**4.** The diagram shows the positions of two shops, *A* and *B*, on a map.

The scale of the map is 1 cm represents 5 km.

Yannis wants to build a warehouse.

The warehouse needs to be

less than 10 km from *A*,
less than 20 km from *B*.

Show by shading where Yannis can build the warehouse.

[Glue here]