# Unit 112: Construction operations and civil engineering operations

# Worksheet 39: Calculations – tonnes (tutor)

1. Work out the following **tonnage** of sand needed for the garden plots. Remember to work on a depth of 50mm when calculating sand.

**Plot 1**

2.4m wide

4m long

Answer: 2.4 x 4 x 0.05 x 1.8 = 0.8 tonnes

**Plot 2**

5.4m wide

8.9m long

Answer: 4.32 tonnes

**Plot 3**

8.2m wide

9.8m long

Answer: 7.23 tonnes

**Plot 4**

9.7m wide

6m long

Answer: 5.23 tonnes

1. Work out the following **tonnage** of granular sub base needed for the garden plots. Remember to work on a depth of 100mm when calculating GSB.

**Plot 5**

6.9m wide

2.5m long

Answer: 6.9 x 2.5 x 0.1 x 2.1 = 3.6 tonnes

**Plot 6**

6.4m wide

7.6m long

Answer: 10.21 tonnes

**Plot 7**

9.2m wide

5.8m long

Answer: 11.2 tonnes

**Plot 8**

9.7m wide

6.9m long

Answer: 14.05 tonnes