**Activity 3 Worked solutions: Calculating unit rates**

**Item a**

Using the information provided on the Activity 3 Reference sheet calculate the unit rate for:

Foundation excavation not exceeding 2 m deep.

Plant

Excavator 0.2 hours × £36.30 per hour = £7.26

Labour

Excavator driver 0.2 hours × £24.60 per hour = £4.92

Banksman 0.2 hours × £20.50 per hour = £4.10

\_\_\_\_\_\_\_\_\_\_\_

Total (unit rate) = £16.28 per m3

\_\_\_\_\_\_\_\_\_\_\_

**Item b**

Using the information provided on the Activity 3 Reference sheet calculate the unit rate for:

A142 mesh reinforcement 2.22 kg per m2, minimum 300 mm side and end laps.  
(There is no plant required for this item)

Materials

A142 mesh 35.00 per sheet ÷ (4.8 × 2.4) = £35.00 ÷ 11.52 = £3.04

+ 22.5% waste £0.68

Spacer blocks/chairs 5 No × £0.70 = £3.50

+ 5% waste £0.18

Tie wire 9 length × £0.03 = £0.27

+ 5% waste £0.01

\_\_\_\_\_\_\_\_

Sub-total materials £7.68

Labour

Steel fixer 0.15 hours x £26.30 = £3.95

\_\_\_\_\_\_\_\_

Total (unit rate) = £11.63 per m2

\_\_\_\_\_\_\_\_

**Item c**

Using the information provided on the Activity 3 Reference sheet calculate the unit rate for:

One brick wall in type B facings, in 1:1:6 mortar, pointed both sides as the work proceeds.

Materials

Bricks (£722.00 ÷ 1000 = £0.72 each) 119 No × £0.72 = £85.68

Mortar 0.054 m3 × £125.00 = £6.75

\_\_\_\_\_\_\_\_\_

Sub-total materials £92.43

+ 7.5% waste £6.93

Labour

Bricklayer 2.8 hours × £28.75 = £80.50

Labourer 1.4 hours × £19.50 = £27.30

\_\_\_\_\_\_\_\_\_

Total (unit rate) = £207.16 per m2

\_\_\_\_\_\_\_\_\_