**Activity 1: Completing a Bill of Quantities (BoQ)**

**Exercise 1**

Calculate the totals for each row by multiplying the quantity by the rate.

Example for item (a) trenches:

Total = Quantity × Rate

Total = 10 × 35.00

Total = 350.00

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item No** | **Description** | **Quantity** | **Unit** | **Rate (£)** | **Total (£)** |
| (a) | Excavate foundation trench | 10 | m3 | 35.00 | 350.00 |
| (b) | Concrete for foundation | 5 | m3 | 95.00 |  |
| (c) | Brickwork (outer leaf) | 20 | m2 | 72.00 |  |
| (d) | Concrete block (inner leaf) | 20 | m2 | 42.00 | 840.00 |
| (e) | Insulation in cavity | 18 | m2 | 10.00 |  |
| (f) | DPC over 300 mm widths | 18 | m2 | 6.00 |  |
| (g) | Plastering on inner leaf | 18 | m2 | 27.00 |  |
| Total | | | | |  |

**Exercise 2**

Fill in the blanks for this extract of a BoQ relating to roofing works.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item No** | **Description** | **Quantity** | **Unit** | **Rate (£)** | **Total (£)** |
| (a) | Roof trusses | 10 | No |  | 950.00 |
| (b) | Supply and fix roofing felt | 100 | m2 | 6.00 |  |
| (c) | Softwood tile battens | 350 | m | 2.30 |  |
| (d) | Roof tiling | 100 | m2 |  | 2,400.00 |
| (e) | Ridge tiles | 30 | m | 12.00 |  |
| (f) | Flashing around chimney | 5 | m | 35.00 |  |
| (g) | 100 mm gutter | 20 | m | 15.00 |  |
| (h) | 75 mm downpipes | 11 | m |  | 154.00 |
| Total | | | | |  |

**Exercise 3**

Fill in the blanks for this extract of a BoQ relating to electrical installations.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item No** | **Description** | **Quantity** | **Unit** | **Rate (£)** | **Total (£)** |
| (a) | Wiring for lighting points | 25 | No | 65.00 | 1,625.00 |
| (b) | Install power sockets | 20 | No | 55.00 |  |
| (c) | Consumer unit installation | 1 | No | 350.00 | 350.00 |
| (d) | Supply and fix lighting fittings | 15 | No |  | 375.00 |
| (e) | Install circuit breakers in panel board | 10 | No | 50.00 |  |
| (f) | Installation of outdoor lighting | 5 | No | 40 |  |
| (g) | Builders work in connection with electrical installations |  | Item | 250.00 | 250.00 |
| (h) | Final testing and commissioning |  | Item | 150.00 |  |
| Total | | | | |  |