Unit 108: Wood occupations

# Worksheet 19: Drawings (tutor)

1. Complete the table below for the descriptions and uses of each drawing term.

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| **Drawing term** | **Description** | **Uses** |
| Isometric projection | 3D image of item. Horizontals are angled at 30° and verticals remain vertical, creating the illusion of the item being 3D. | To give a 3D representation of an item on a 2D page, enabling the viewer to visualise the item as a whole. |
| Line drawing | 2D representations of one plane or side of an item, using lines and measurements to provide an idea of the item’s proportions and shape. | To give a 2D representation of the dimensions and shape of an item. |
| Perspective drawing | 3D image of item. Lines recede to converge at a common vanishing point. Verticals remain vertical and recede, creating the illusion of space. | To give a 3D representation of an item on a 2D page, enabling the viewer to visualise the item within a naturally receding space. |
| Elevation | A 2D representation of several planes or sides of an object, such as the front, side and rear of a house, or a joiner’s setting out rod of a window’s sides and top. | To give a 2D representation of the dimensions and shape of an item from some or all sides. Often to scale to allow measurements to be lifted. |
| Orthographic projection | A 2D or 3D method of projecting lines through a plane (e.g. 45°) to obtain a view of another side of a 3D item. | To give a 2D or 3D image of an item from a different angle. Projecting lines through the plane allow accurate transferral of measurements and proportions. |

1. Rearrange so the scale columns match with the correct statement:

|  |  |
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| 1:1 | Used for planning details in setting out |
| 1:5 | Used for detailed components |
| 1:100 | Used for elevations and plan views |
| 1:500 | Used for block plans |
| 1:1250 | Used for location plans |

1. Try to solve the following calculations.

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| A line on a 1:100 scale drawing measures 350mm. What would this measure full scale? | = | 35m |
| A component on a 1:5 scale drawing measures 200mm x 500mm. What is its actual measurement? | = | 1m x 2.5m |
| If the sides of a 2m x 2m wall were doubled in size, how much bigger would the area be? | = | 4X |
| If the sides of a 2m x 2m x 2m cube were doubled in size how much bigger would the cube be? | = | 8X |