**Skill Sheet: Visualising Forms (Edexcel)**

***Examiners***

***Top Tip***

*Remember, in an isometric drawing the leading edge is vertical, and the sides are at an angle of 30o to this*

***What You Need to Know:***

You may be asked to draw 2D and 3D forms of objects or to use a 3D drawing to create 2D drawings of an object. 3D drawing techniques that you should be able to use include isometric, perspective and freehand sketching. 2D methods include working drawings, such as 3rd angle orthographic, which use standard conventions, show dimensions and are drawn to scale.

When converting between 2D and 3D drawings, it is important to use the sizes to ensure that the image is in proportion to the object.

***Example:***



**Figure 1**

Figure 1 shows a drawing of a child’s toy boat.

Complete the orthographic projection of the boat below.

 ***Answer:***

1. Figure 2 shows an orthographic projection of a cardboard model of a bus. Complete an isometric view of the bus. One square on the orthographic projection equals one square on the isometric paper.

***Now Try These:***

****

**Figure 2**

**Practice Sheet: Visualising Forms (Edexcel)**

***Now Try These:***

1. A child’s building block is shown in figure 1.

**Figure 1**

Complete the orthographic projection of the building block below.



1. ****Figure 2 shows a smart phone. Using the dimensions shown, produce an isometric drawing on the grid below.

**Figure 2**

All dimensions shown are in mm and each square on the isometric grid equals 5mm.

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**Answers:**

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1.



**Practice Sheet: Visualising forms (Edexcel)**

1.



2.

