

Task 3: Practical Maths Worksheet – Area and Perimeter in Digital Workspaces

In this task, you will calculate and apply area and perimeter to design a digital workspace layout. Use your mathematical reasoning to measure space for desks, cables, and IT equipment accurately.

Section 1 – Area and Perimeter Calculations

Calculate the area and perimeter for each item. Remember to include units.

Item	Dimensions (m)	Area (m ²)	Perimeter (m)
Student Desk	1.5 × 0.8	_____	_____
Chair Area	0.5 × 0.5	_____	_____
Technician's Desk	2.0 × 0.8	_____	_____
Printer Table	1.0 × 0.6	_____	_____
Network Rack	1.2 × 0.6	_____	_____

Section 2 – Applied Word Problems

Solve the following practical maths problems based on a digital workspace setting.

1. You are setting up 8 desks with a surface area of 1.2 m² each. What is the total desk area required?

Answer: _____

2. A network cable runs around the perimeter of a 4 m × 5 m room. How many metres of cable are needed?

Answer: _____

3. The printer table measures 1.0 m × 0.6 m. If two are placed side by side, what is the combined area and perimeter?

Answer: _____

4. A server room measures 6 m × 4 m. If 25% of space is taken by equipment, what area remains available?

Answer: _____

5. Challenge: A U-shaped desk is made from three rectangles (2 m × 1 m for each side, 1 m × 1 m middle). Estimate its total perimeter.

Answer: _____

Section 3 – Reflection

Explain how you used area and perimeter to make your design decisions. How did maths help improve your workspace plan?

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