

Planning a new room

NAME: _____

AIM: To design and build a bedroom using a **scale of 1:20 cm**, including all furniture.

KEYWORDS: area, scale factor, net, 3D, 2D, dimensions.

INFORMATION: The room is 4m in length and 3m wide. (Scale drawing given to students)
The room will need a **new floor**.
The room needs a **bed, wardrobe, desk** and a **bookshelf**.
There must be enough room remaining to move around.
You have a **maximum of £500** to spend.
You are expected to present your project with full working out.

		Tick when complete
Part 1	- Write an introduction using the keywords above.	<input type="checkbox"/>
Part 2	- Calculate the area of the room (full size)	<input type="checkbox"/>
Part 3	- Choose a floor - Calculate the cost of the floor (How many packs are needed?)	<input type="checkbox"/> <input type="checkbox"/>
Part 4	- Choose the furniture you would like. (Remember to check the dimensions) - Calculate the cost of all the furniture. - Calculate the floor area each piece of furniture requires. - Add this to your room, drawing the furniture to scale. - Calculate the area remaining for free space	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Part 5	- Create a net of the furniture using the scale. (Remember the height!) - Build the 3D cuboids	<input type="checkbox"/> <input type="checkbox"/>
Part 6	- Write a conclusion explaining what you have created, what maths has been used, total cost of the room, total area taken up by furniture and how you think you can improve the project.	<input type="checkbox"/>

Extension

Create a scaled 3D version of the room itself so you can see more accurately see how the room will look with the furniture.

Marks:

Each part will be marked with:

3 marks (Well presented, neat and accurate)

2 marks (accurate but not neat)

1 mark (poor presentation, incorrect and scruffy)

TOTAL MARKS:

Flooring



HEMSE

Laminate floor,
click-lock function

£10.61
1 Pack = 2.66 m²



TUNDRA

Laminate floor,
click-lock function
dark brown

£13.12
1 Pack = 2.39 m²



BALK

Wooden floor

£24.79
1 Pack = 1.55 m²



MORÄN JORD

Floor tile
blue

£8.99
1 Pack = 0.98 m²

Beds



EINA

Bed frame
light brown

£37.00

Length: 208 cm
Width: 97 cm
Height: 39 cm



HEMNES

Bed frame

£107.00

Colours available:
Black
White

Length: 207 cm
Width: 99 cm
Footboard height:
68 cm
Headboard height:
121 cm

ODDA



Bed with storage
black, white

£149.00

Length: 206 cm
Depth: 83 cm
Height: 68 cm

MÖRRUM



Bed with storage
white

£159.00

Length: 207 cm
Width: 96 cm
Height: 68 cm

Wardrobes

HEMNES



Wardrobe

£279

Colours available:
Black
White

Width: 110 cm
Depth: 61 cm
Height: 198 cm



ANEBODA

Wardrobe

£49

Colours available:
Birch
White

Width: 81 cm
Depth: 50 cm
Height: 180 cm

ASPELUND



Wardrobe
antique effect

£110.00

Width: 130 cm
Depth: 54 cm
Height: 190 cm



BODÖ

Wardrobe unit
black

£25.00

Width: 113 cm
Depth: 50 cm
Height: 196 cm

Desks



GUSTAV

Desk with shelf unit

£99

Colours available:
Black
Birch

Width: 110 cm
Depth: 60 cm
Height: 85 cm



MIKAEL

Desk

£36

Colours available:
Black
Birch

Width: 140 cm
Depth: 75 cm
Height: 76 cm



JONA

Desk
£89.90

Colours available:
Oak
Birch

Width: 140 cm
Depth: 65 cm
Height: 73 cm



JONAS

Desk with pull-out panel

£79.90

Colours available:
Oak
Birch

Width: 151 cm
Min. depth: 85 cm
Max. depth: 135 cm
Height: 73 cm

Bookshelf



BERGSBO

Bookcase with
glass-doors

£149.00

Width: 119 cm
Depth: 40 cm
Height: 202 cm



FLÄRKE

Bookcase

£12.99

Width: 59 cm
Depth: 25 cm
Height: 171 cm

The new room

Scale 1:20cm

