Orange High School

Year 11 Numeracy

Task 1 Assignment 2023

Outcomes Assessed
N6-1.1: recognises and applies functional numeracy concepts in practical situations, including personal and community, workplace and employment, and education and training contexts

N6-1.2: applies numerical reasoning and mathematical thinking to clarify, efficiently solve and communicate solutions to problems

N6-2.1: chooses and applies appropriate operations with whole numbers, familiar fractions and decimals, percentages, rates and ratios to analyse and solve everyday problems

N6-2.2: chooses and applies efficient strategies to analyse and solve everyday problems involving metric relationships, distance and length, area, volume, time, mass, capacity and temperature

N6-3.1: chooses and uses appropriate technology to access, organise and interpret information in a range of practical personal and community, workplace and employment, and education and training contexts |

Weighting	**30%**	**Due:** This assignment is due to your classroom teacher 2 weeks from the date received (Term 1 Week 8).

| **Penalties as per assessment booklet**
Failure to submit the assignment within the negotiated timeframe may result in an N-award in Numeracy |
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Year 11 Numeracy Assignment

Nature of the task

In this task you will renovate and redecorate a bedroom. You can choose to renovate your own bedroom, a friend's bedroom or a fictional bedroom.

There are four parts to the task. Answer all questions in each part.

- Select and use ICT where appropriate.
- Show all of your calculations.
- Include references to any websites used.
- Submit your work as either a hard copy or as a digital file.

This will involve independent preparation at home. You will also be given class time to develop a response.

Hand-in components of this task

Students will be required to complete the questions either in the space provided or on separate A4 sheets of paper. They will need to hand in a hard copy of their calculations which addresses all the criteria outlined in this booklet.

Assessment criteria

The assessment of your response to this task will be based on:

- the accuracy and relevance of your calculations
- the application of numeracy knowledge and skills to this task
- your numerical reasoning and mathematical thinking (NRMT)
- your use of technology to investigate and solve problems.

Renovate, redecorate

Your challenge is to renovate and redecorate a bedroom. The bedroom can be your existing bedroom, a friend's bedroom or a fictional bedroom.
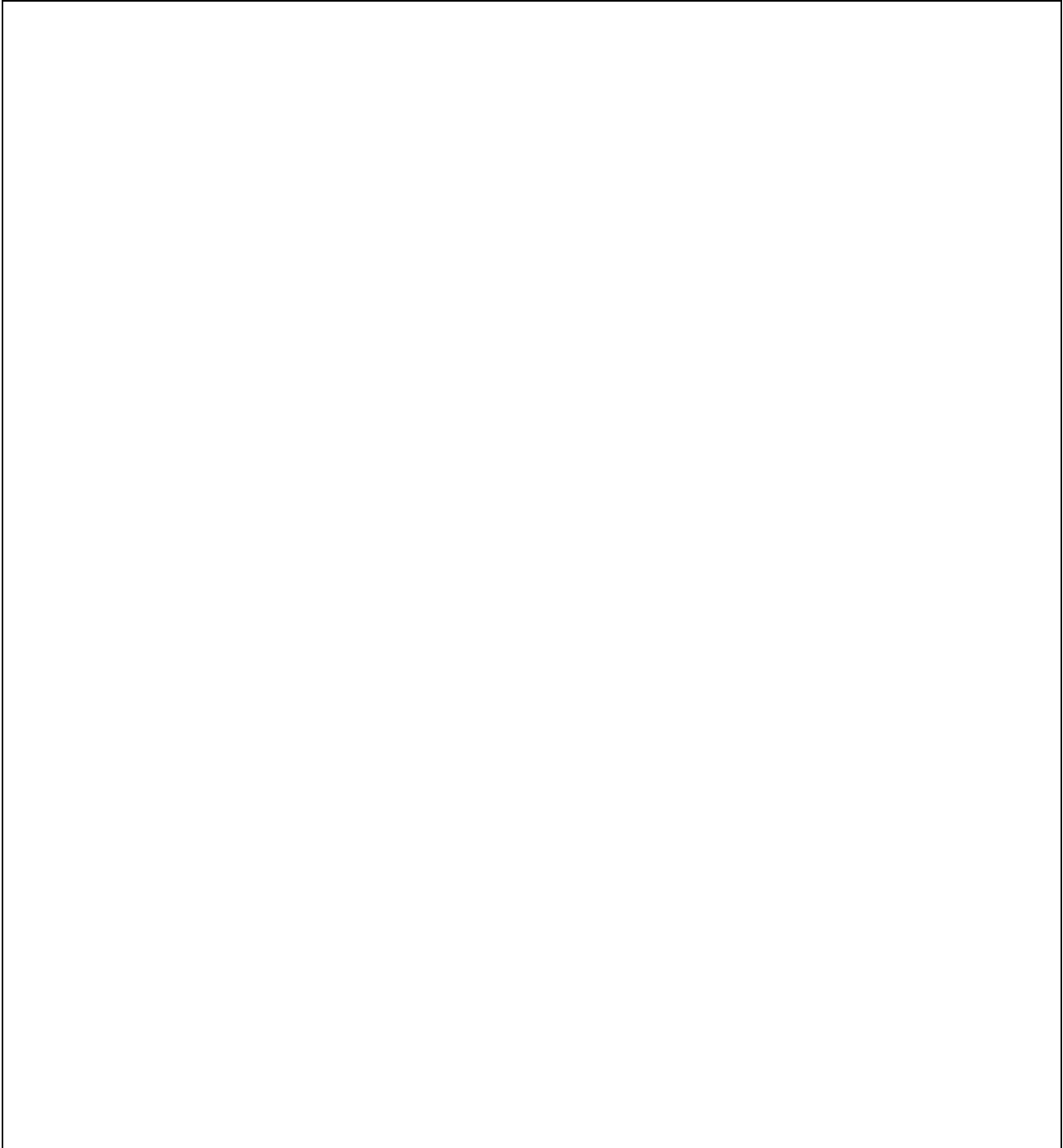
Part A: Planning

Who is going to be using this bedroom? Give details about the age and interests of the person. These details may be important in your selection of paint colours for the walls, the type of flooring you will use, the furniture you choose and any furnishings. **(3 marks)**

Part B: Research, measurement and calculations

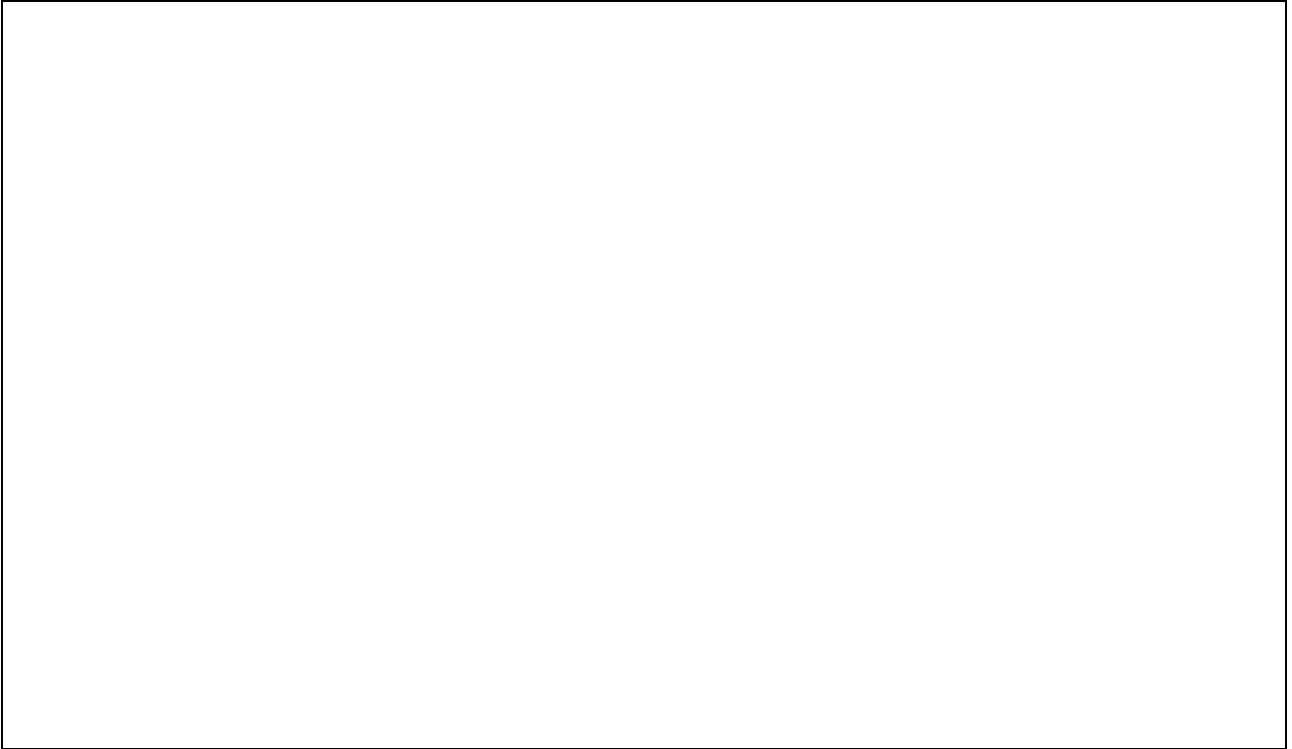There are three essential elements of this renovation:

- The walls of the room must be repainted with at least 2 coats of paint.

- The flooring must be replaced.

- The room must include: a new bed, chest of drawers, desk and a chair.

1. Create a rough sketch of the room, including all dimensions, to help with your calculations. Include the dimensions of the door and any windows. **(3 marks)**
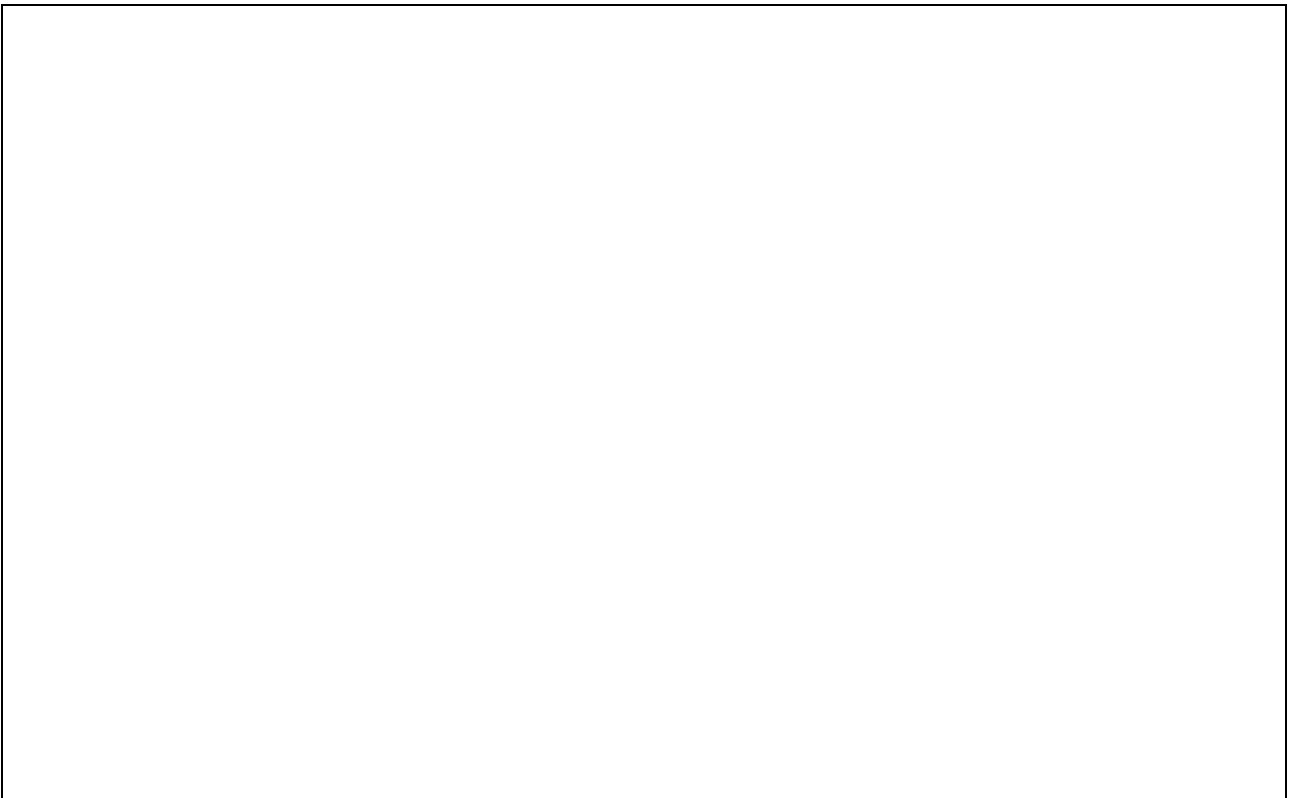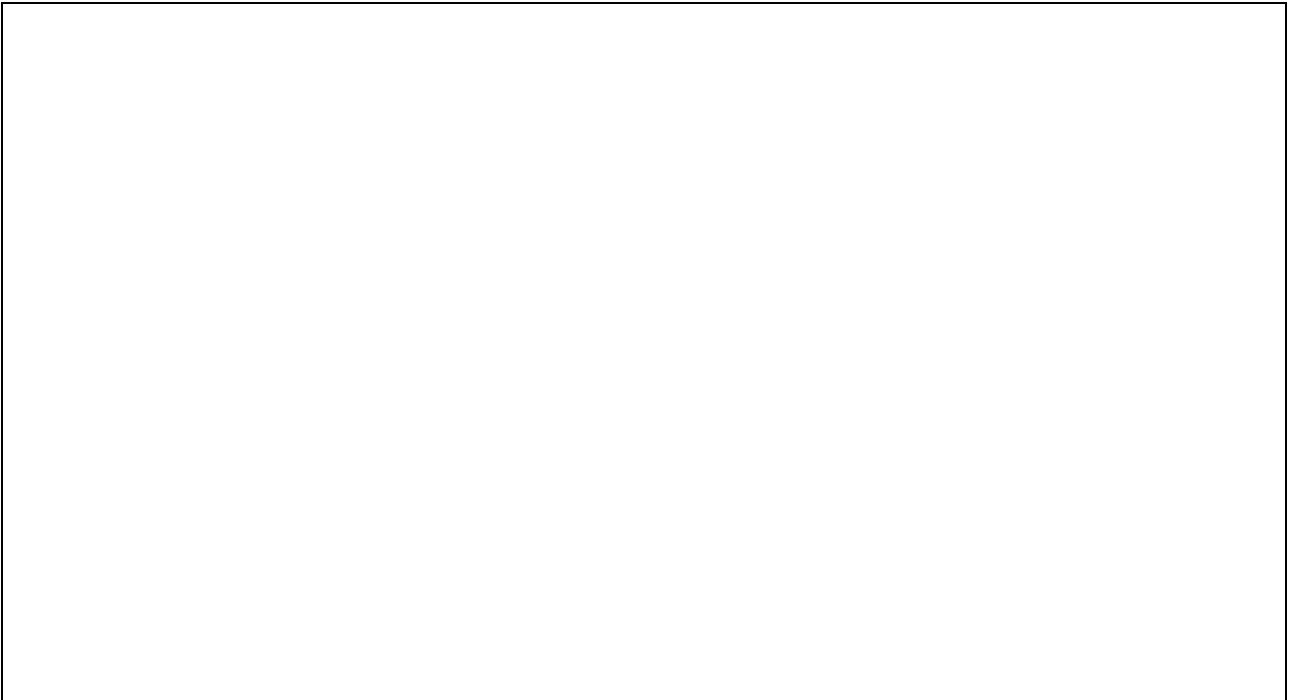
2. For the paint:

    a. Choose the brand, type, colour and supplier of the paint. Provide details for your choice or choices (if more than one). **(2 marks)**
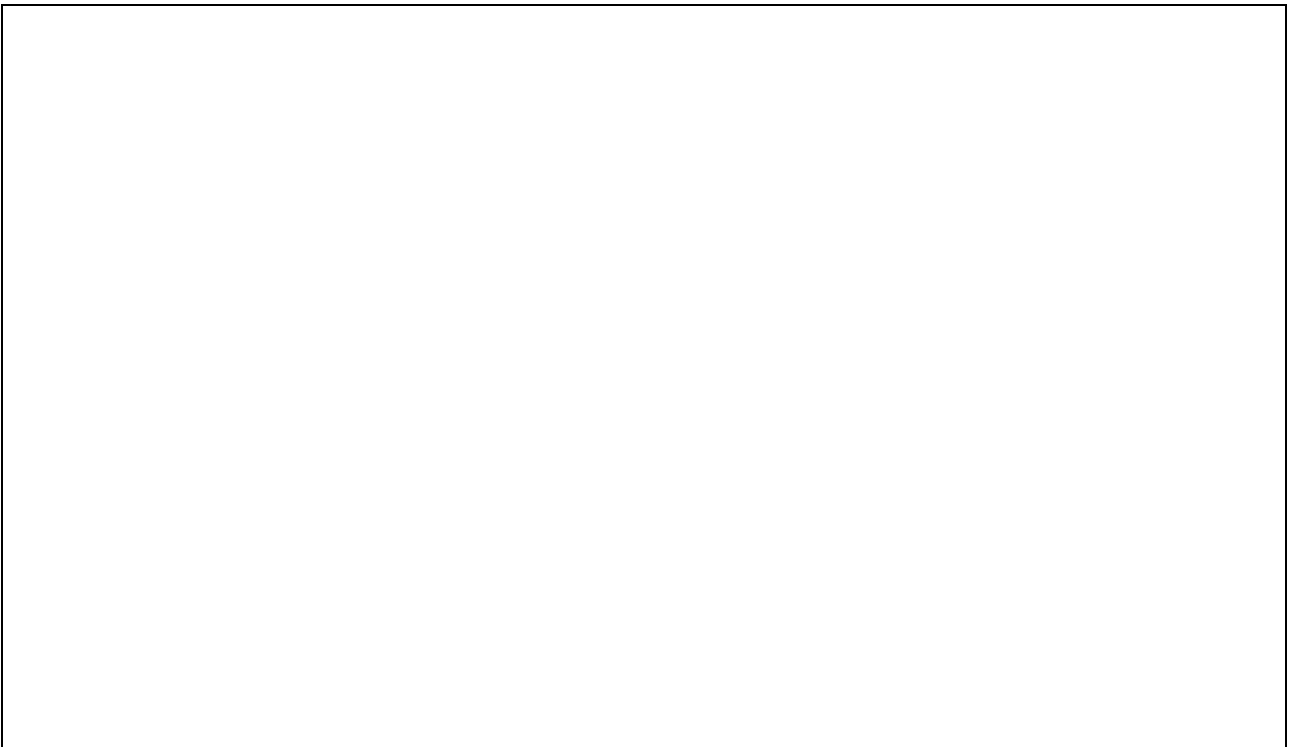
    b. Find the area of the surfaces that need to be painted. **(5 marks)**

c. Estimate how many litres of paint you will need, providing details for your estimation. Calculations could be based on the paint coverage in m²/L of your chosen paint or you could use an <u>online paint calculator</u>. **(2 marks)**

d. Calculate how much the paint will cost. **(1 mark)**

3. For the flooring:

    a. Calculate the floor area. **(1 mark)**

    b. Choose the brand, type, colour and supplier of the flooring, providing details for your choice. **(2 marks)**

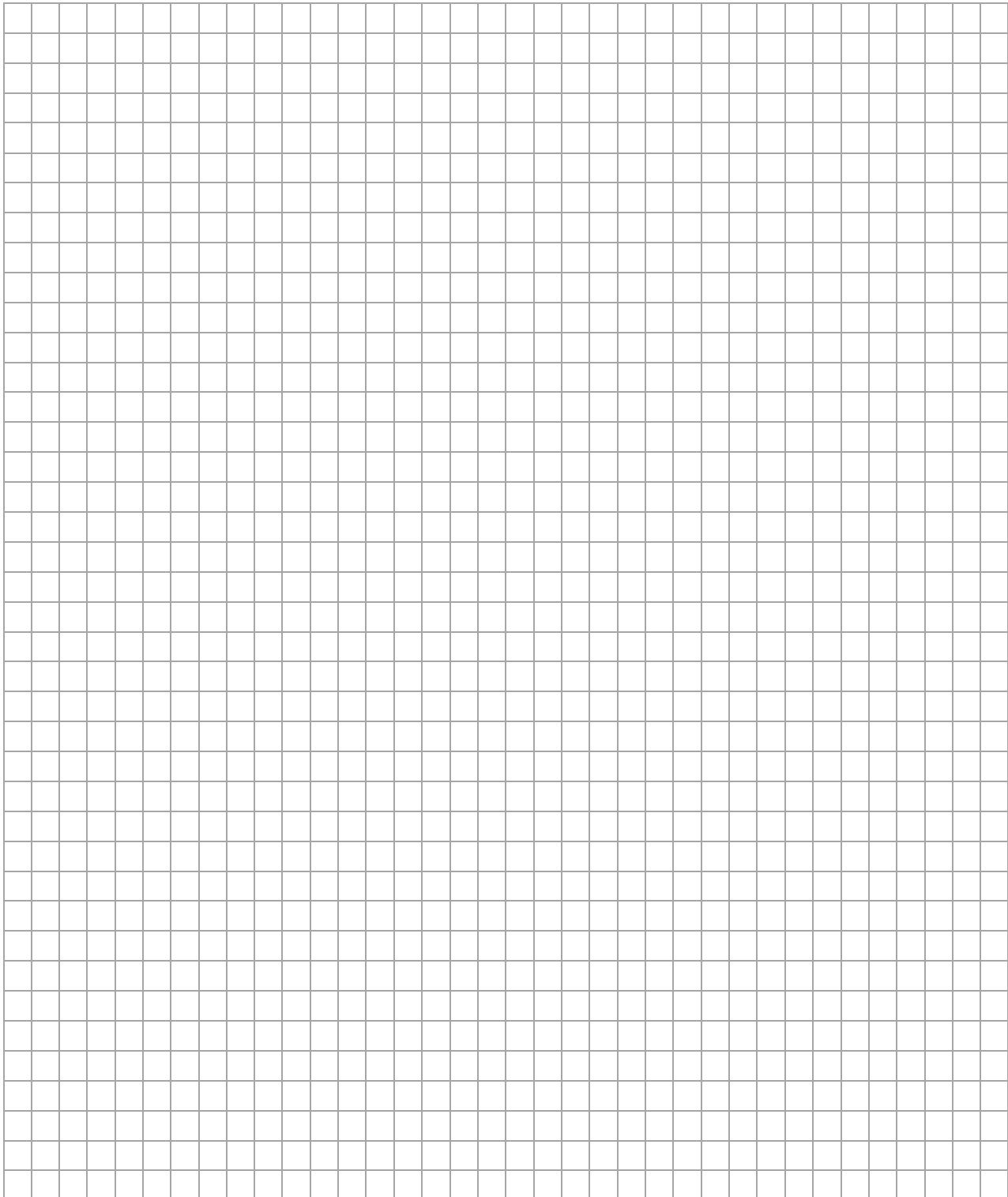   **c.** Calculate how much the flooring will cost. **(1 mark)**

4. Research and decide on each item of furniture. Determine their cost and the supplier, providing details for your choice. **(2 marks)**

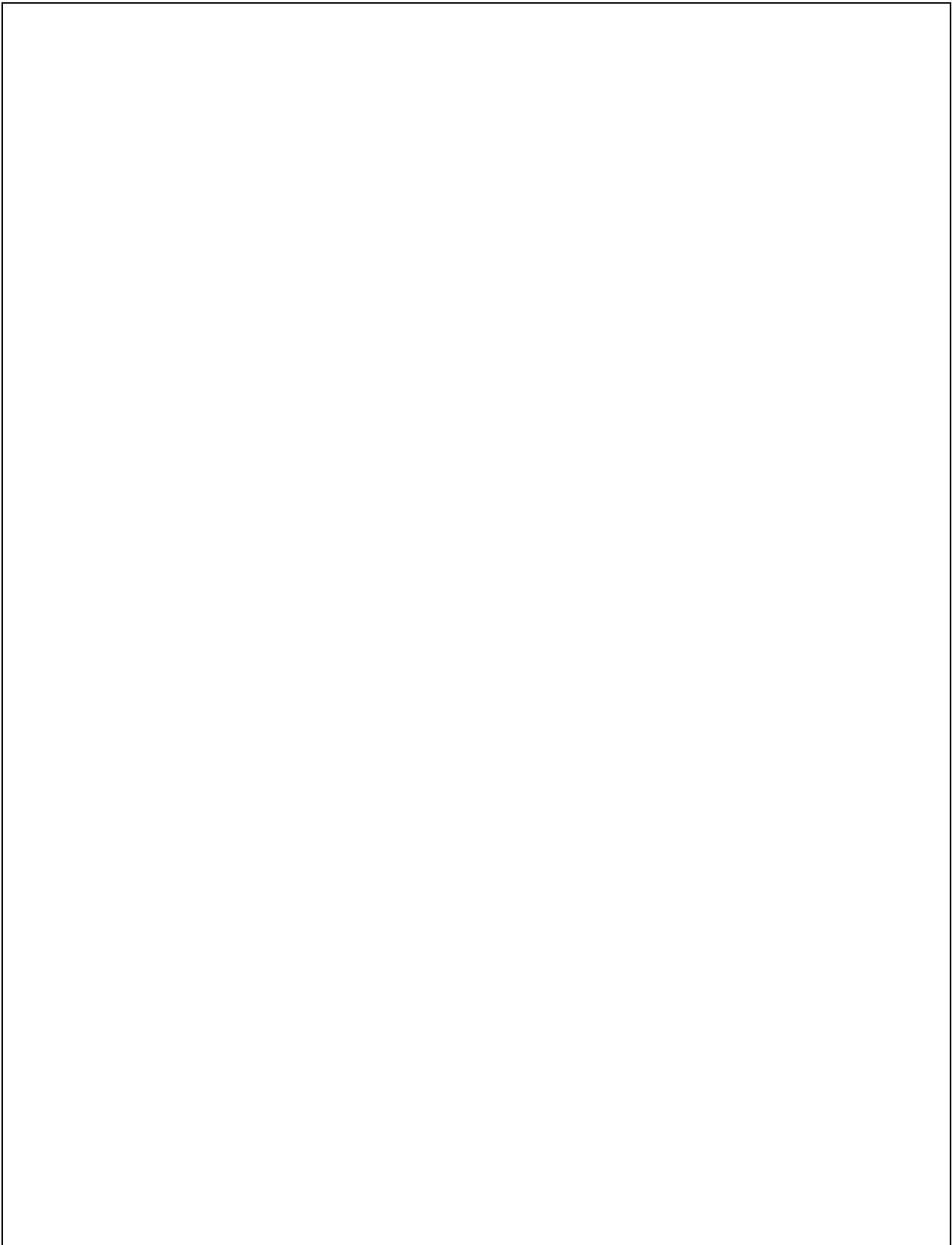**5.** Create a floor plan of the room to scale. This can be done by hand or using technology, such as an online tool.

    a. Include the length and width of the room on your diagram, as well as the ceiling height. Identify the position of the door and any windows.

    b. Include the furniture items on your scale diagram, keeping to the scale. Label the lengths and widths.

(5 marks)

Part C: Furnishings and design

Personalise the bedroom. This can be achieved by adding decorative items and should include items such as wall art, posters, a bedside light, mirror and bed linen. Provide images of the items that you have chosen. **(3 marks)**

Part D: Conclusion

Write two paragraphs explaining what you have learnt about renovating and redecorating a room based on the research you did for this task. Describe how this might help you in the future. You may include things that you would need to consider if you were to renovate and redecorate a room for real. **(5 marks)**

End of assessment task

Year 11 Assessment Task 1 Marking Criteria 2023

Total Marks _____ / 35

	A	B	C	D	E
Part A: Planning (3 marks)	Demonstrates a detailed plan and a comprehensive understanding of the planning process when renovating and redecorating a room. **(3 marks)**	Demonstrates a plan and a thorough understanding of the planning process when renovating and redecorating a room. **(2 – 2.5 marks)**	Demonstrates a plan and a sound understanding of the planning process when renovating and redecorating a room. **(1.5 marks)**	Demonstrates a plan and a basic understanding of the planning process when renovating and redecorating a room. **(1 mark)**	Demonstrates a plan and a limited understanding of the planning process when renovating and redecorating a room. **(0 – 0.5 marks)**
Part B: Research, Measurement and Calculations (24 marks)	Demonstrates a comprehensive understanding of measurement. Student competently apply their skills to solve problems involving length, area and capacity and critically evaluate solutions. Apply comprehensive numeracy reasoning skills to renovate and redecorate a bedroom and justify their mathematical thinking. Demonstrates competence and efficiency in their choice and use of technology to solve	Demonstrates a thorough understanding of measurement. Student competently apply their skills to solve problems involving length, area and capacity. Apply comprehensive numeracy reasoning skills to renovate and redecorate a bedroom and explain their mathematical thinking. Chooses and uses appropriate technology to research, calculate and communicate numerical reasoning. **(14 – 18 marks)**	Demonstrates a sound understanding of measurement. Student can apply their knowledge in practical situations involving length, area and capacity. Apply sound numeracy reasoning skills to renovate and redecorate a bedroom and describe their mathematical thinking. Uses technology to research, calculate and communicate numerically. **(9 – 13 marks)**	Demonstrates a basic understanding of measurement. Student can convert between familiar units of length and calculate area. Use simple numeracy skills to renovate and redecorate a bedroom. Demonstrates elementary use of technology to research, calculate and/or communicate numerically. **(4 – 8 marks)**	Demonstrates a limited understanding of measurement. Student can convert between familiar units of length and calculate area. Use elementary numeracy skills to renovate and redecorate a bedroom. Demonstrates limited use of technology to research, calculate and/or communicate numerically. **(0 – 3 marks)**

	numerical problems and communicate and justify their reasoning. **(19 – 24 marks)**				
Part C: Furnishing and design (3 marks)	Apply comprehensive numeracy reasoning skills to renovate and redecorate a bedroom and justify their mathematical thinking. **(3 marks)**	Apply comprehensive numeracy reasoning skills to renovate and redecorate a bedroom and explain their mathematical thinking. **(2 – 2.5 marks)**	Apply sound numeracy reasoning skills to renovate and redecorate a bedroom and describe their mathematical thinking. **(1.5mark)**	Use simple numeracy skills to renovate and redecorate a bedroom. **(1 mark)**	Use elementary numeracy skills to renovate and redecorate a bedroom. **(0 – 0.5 marks)**
Part D: Conclusion (5 marks)	Demonstrates a comprehensive and detailed response about what they have learnt about renovating and redecorating a bedroom. Student can justify their response using research. **(4 – 5 marks)**	Demonstrates a thorough response about what they have learnt about renovating and redecorating a bedroom. Student can explain their response using research. **(3 – 3.5 marks)**	Demonstrates a sound response about what they have learnt about renovating and redecorating a bedroom. Student can describe their response using research. **(2 – 2.5 marks)**	Demonstrates a basic response about what they have learnt about renovating and redecorating a bedroom. **(1 – 1.5 marks)**	Demonstrates a limited response about what they have learnt about renovating and redecorating a bedroom. **(0 – 0.5 marks)**

Teacher's comment: