Student Name: _____	**Class:** _____
Student ID: _____	**Date:** {{DATE}}

Assessment Details

Duration: 1 hour	**Total Marks:** 60
Topics Covered:	• Units and Dimensions • Measurement Techniques • Conversion between Units • Perimeter, Area, and Volume

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Section A: Multiple Choice [20 marks]

Question 1 **[2 marks]**

What is the standard unit of length in the metric system?

A) Meter

B) Centimeter

C) Kilometer

D) Millimeter

Question 2 **[2 marks]**

Which of the following is an example of a derived unit?

A) Meter

B) Liter

C) Gram

D) Newton

Question 3 **[2 marks]**

Convert 500 grams to kilograms.

A) 0.5 kg

B) 5 kg

C) 50 kg

D) 500 kg

Question 4 **[2 marks]**

What is the formula to calculate the perimeter of a rectangle?

A) P = 2(l + w)

B) P = l + w

C) P = 2l + 2w

D) P = l - w

Question 5 **[2 marks]**

Which of the following is a type of angle measurement?

A) Radian

B) Degree

C) Meter

D) Liter

Question 6 **[2 marks]**

Convert 2 kilometers to meters.

A) 2000 m

B) 200 m

C) 20 m

D) 20000 m

Question 7 **[2 marks]**

What is the standard unit of capacity in the metric system?

A) Liter

B) Milliliter

C) Kiloliter

D) Deciliter

Question 8 **[2 marks]**

Which of the following is an example of a measurement tool?

A) Ruler

B) Calculator

C) Pencil

D) Eraser

Question 9 **[2 marks]**

Convert 3000 milliliters to liters.

A) 3 L

B) 30 L

C) 300 L

D) 3000 L

Question 10 **[2 marks]**

What is the formula to calculate the area of a triangle?

A) A = (b x h) / 2

B) A = b + h

C) A = b - h

D) A = b x h

Section B: Short Answer Questions [20 marks]

Question 1 **[4 marks]**

A rectangular garden measures 10 meters in length and 5 meters in width. What is the perimeter of the garden?

Question 2 **[4 marks]**

A water tank can hold 2000 liters of water. If 500 liters of water are already in the tank, what percentage of the tank is filled?

Question 3 **[4 marks]**

A cube has a side length of 6 centimeters. What is the volume of the cube?

Question 4 **[4 marks]**

A circle has a diameter of 14 centimeters. What is the circumference of the circle?

Question 5 **[4 marks]**

A triangular prism has a base area of 20 square centimeters and a height of 10 centimeters. What is the volume of the prism?

Section C: Project-Based Question [20 marks]

Question 1 **[20 marks]**

Design a rectangular room with a length of 8 meters and a width of 6 meters. Calculate the perimeter and area of the room. If the room has a door that is 2 meters wide and 1.5 meters tall, calculate the area of the door and subtract it from the total area of the room. Show your calculations and provide a diagram of the room.

Additional Space for Answers

Marking Guide

Section A: Multiple Choice Questions

1 mark for each correct answer, 0 marks for each incorrect answer

Section B: Short Answer Questions

- Question 1: 2 marks for correct calculation of perimeter, 1 mark for correct units, 1 mark for clear working
- Question 2: 2 marks for correct calculation of percentage, 1 mark for correct units, 1 mark for clear working
- Question 3: 2 marks for correct calculation of volume, 1 mark for correct units, 1 mark for clear working
- Question 4: 2 marks for correct calculation of circumference, 1 mark for correct units, 1 mark for clear working
- Question 5: 2 marks for correct calculation of volume, 1 mark for correct units, 1 mark for clear working

Section C: Project-Based Question

- 4 marks for correct calculation of perimeter and area of the room
- 2 marks for correct calculation of area of the door
- 2 marks for correct subtraction of door area from total area
- 2 marks for clear and accurate diagram of the room
- 10 marks for overall presentation, clarity, and completeness of the project