Chemistry 11

Numbers and Measurement Unit Test
Version #1

Name:_____
Block:_____

Outcome 1	Outcome 2	Outcome 3	Review
1. C	5. C	9. B	13. A
2. A	6. C	10. D	14. A
3. B	7. B	11. A	15. A
4. B	8. C	12. B	16. D
			17. B
			18. A
			19. B
			20. D

PART 2: Calculations

Solve the Following: (remember units!)

1) 12.0 cm x 10.0 cm — 120. cm^2

2) 32.00 cm ÷ 16.0 s — 2.00 cm/s

3) 0.750 cm x 15.0 cm 11.25 — 11.3 cm^2

4) 100.0 cm ÷ 5.0 s — 20. cm/s

5) 2.0 m x 6.1 m x 50. m — 610 (OR) $6.1 \times 10^2 m^3$

6) 23.56 g + 5.695 g 29.255 — 29.26 g

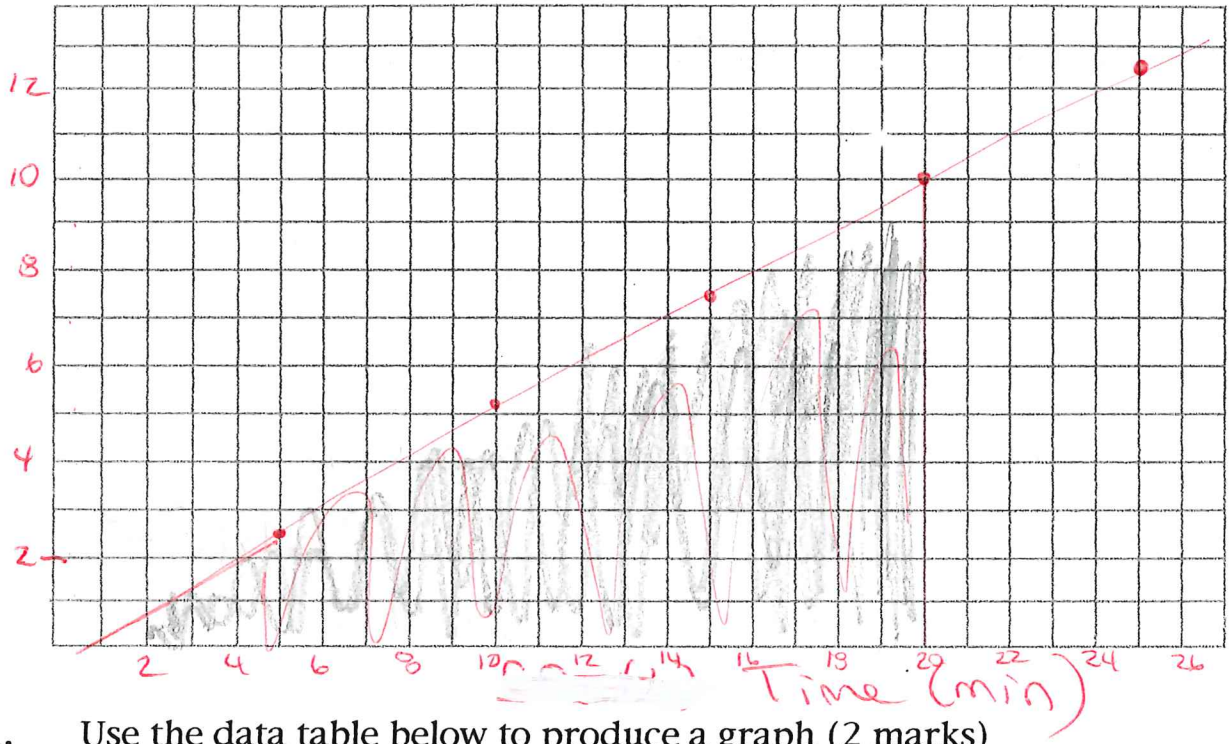
7) 0.001 m + 0.0210 m — 0.022 m

8) $(6.02 \times 10^8 s) \times (3.0 \times 10^3 s)$ 1.806×10^{12} — $1.8 \times 10^{12} s^2$

9) $(9.90 \times 10^9 m) \div (3.30 \times 10^3 m)$ — 3.00×10^6

10) 5.0×10^5 cm + 2.0×10^5 cm — 7.0×10^5 cm

Volume CO_2 vs Time.



1. Use the data table below to produce a graph (2 marks)

CO_2 produced(Litres) y axis	Time (min) x axis
2.5	5.0
5.1	10.0
7.4	15.0
10	20.0
12.6	25.0

2. Based on the graph, how much gas would be produced in 17.5 minutes? (Show the point on the graph) (1 mark)

~ 8.5 - 8.75 L

3. Use the graph to calculate the CO_2 produced per minute. (Calculation triangle must be drawn on the graph.) (1 mark)

Slope = $\frac{10.0\,L}{200\,mins}$ = 0.500 $\frac{L}{mins}$ of CO_2 produced.