

Science 10 - Practice Exam -> Answers

Part 1 - Multiple Choice

- | | |
|-------|------------|
| 1. d | 21. b |
| 2. c | 22. d |
| 3. a | 23. a |
| 4. b | 24. b |
| 5. d | 25. a |
| 6. c | 26. b |
| 7. c | 27. d |
| 8. b | 28. c |
| 9. c | 29. a or d |
| 10. d | 30. d |
| 11. b | 31. a |
| 12. c | 32. b |
| 13. c | 33. c |
| 14. d | 34. b |
| 15. c | 35. d |
| 16. b | 36. b |
| 17. b | 37. a |
| 18. a | 38. c |
| 19. d | 39. c |
| 20. c | 40. c |

Part 2 - Compounds

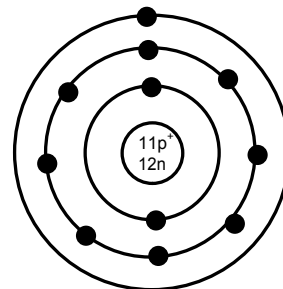
- a) ionic chromium (III) bromide
- b) ionic beryllium sulfate
- c) ionic aluminum iodide
- d) molecular fluorine triiodide
- e) ionic Co_2S_3
- f) ionic GaP
- g) molecular N_2O_4
- h) ionic $\text{K}_2\text{Cr}_2\text{O}_7$

Part 3 - Atoms

1. standard atomic notation for sodium-23



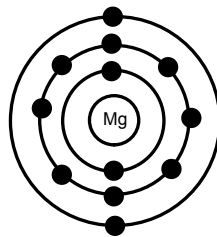
Bohr-Rutherford Diagram



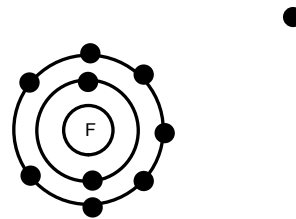
#p⁺ = 11
#e⁻ = 11
#n = 12

- 2.

Bohr Diagram



Bohr Diagram

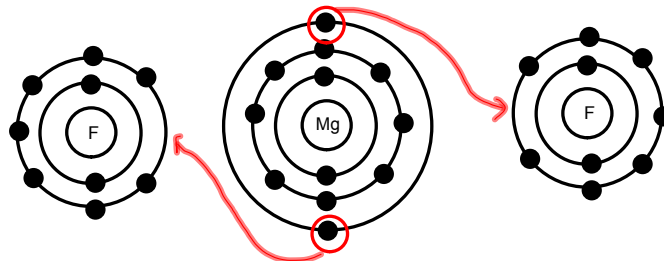


- 3.

magnesium

fluorine

- 4.

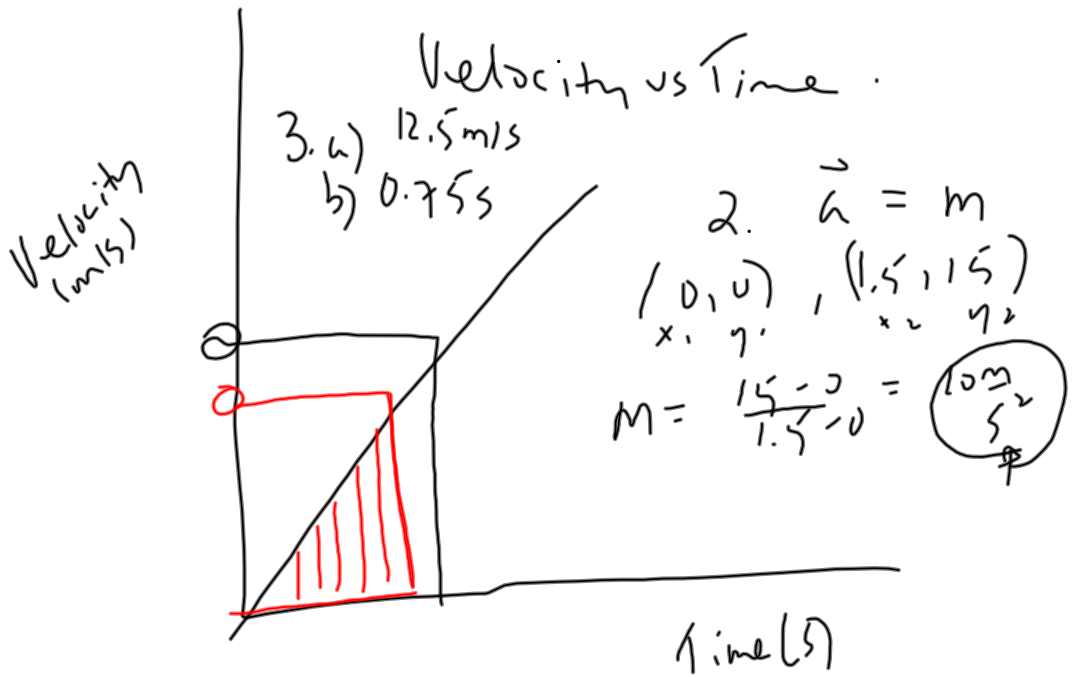


5. Mg^{2+} , F^-

6. MgF_2

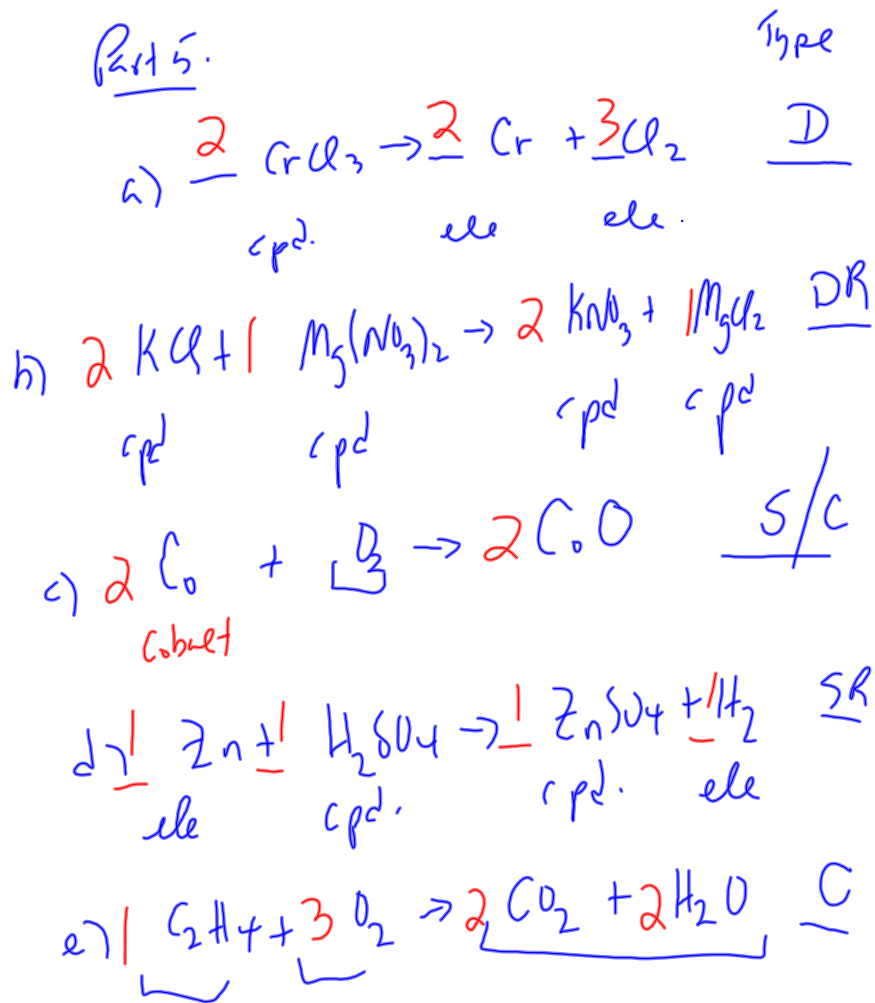
Part 4. -Vel-Time.

#	Time (s)	Vel. (m/s)	(t, \vec{v})
			$(0.0, 0.0)$
			$(0.5, 5.0)$

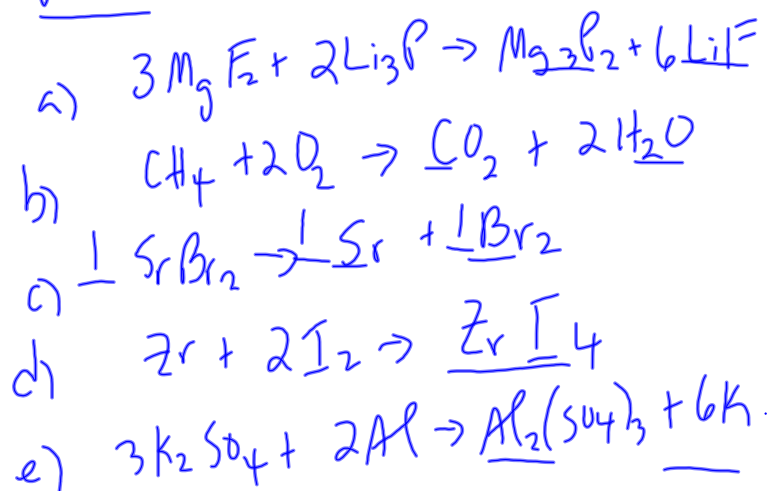


4. $A = \Delta \vec{d} = \frac{1}{2}bh$
 $= \frac{1}{2}(1.5)(15) = 11.25 \text{ m}$
 $= 11 \text{ m}$

Part 5.



Part 6.



Part 7

- ① list variables
- ② pick a formula
- ③ rearrange formula
- ④ substitute values
- ⑤ Final Answer: units + SD.
- ⑥ Word Statement

1. $t = 12h$
 $v_{kv} = 210 \frac{km}{h}$
 $d = ?$

$v_{kv} = \frac{d}{t}$
 $d = v_{kv} t$
 $d = \left(\frac{210km}{h}\right) \left(\frac{12h}{1}\right)$
 $d = 2.5 \times 10^3 km$

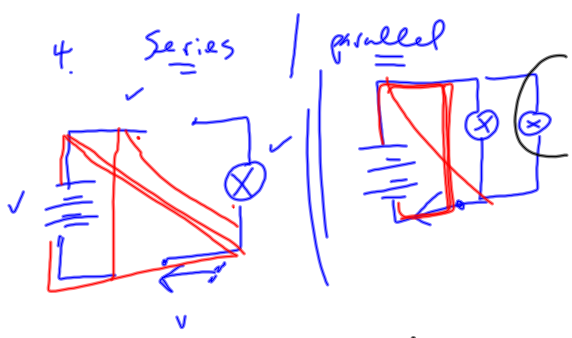
The distance was $2.5 \times 10^3 km$.

2. $\vec{v}_f = 37 \frac{m}{s}$, west
3. $\vec{v} = 1.2 \frac{m}{s}$, west
4. a) $\vec{v} = 0.38 \frac{m}{s}$, east
 b) $v_{kv} = 0.080 \frac{m}{s}$, west
5. $\vec{v}_{kv} = 2.5 \times 10^3 \frac{km}{h}$, downward

Part 8 - Electricity

* Use complete sentences.

- * 1. It is called electrostatics.
- * 2. They are positive and negative.
(load)
- * 3. They are light, switch, battery and wires



6. The other bulb stays lit. } parallel
 The other bulb will go out } series.