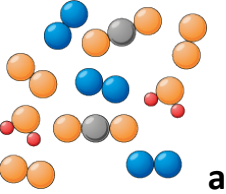
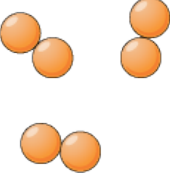
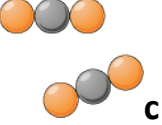
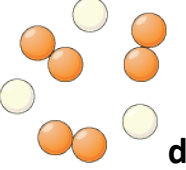
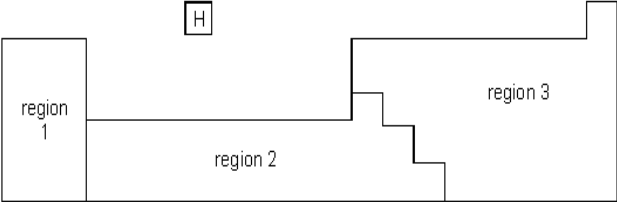


Year 8 : Elements FACT SHEET

Elements, compounds and mixtures	
1. What do we call a substance made up of only one type of atom?	Element
2. What do we call a substance made up of 2 or more elements chemically bonded?	Compound
3. What do we call 2 or more elements/compounds not chemically bonded together?	Mixture
4. What do we call 2 or more atoms bonded together?	Molecule
5. Decide if each picture is of an element, compound or mixture  a  b  c  d	a – mixture b - element c – compound d – mixture

Periodic table	
6. State what the periodic table shows	Elements
7. On the periodic table below, which letters show: a. Metals b. Non-metals 	a. Regions 1 and 2 b. Region 3
8. What do we call horizontal rows in the periodic table	Periods
9. What do we call vertical columns in the periodic table	Groups
10. Explain why elements are put into groups	They react in similar ways
Metals and non-metals	
11. List 3 properties of metals	<ul style="list-style-type: none"> • Conduct electricity • Conduct heat • Shiny • Ductile (can be stretched into wires) • Sonorous (make a noise when hit) • High melting point
12. Explain why metals are used in electrical wires	<ul style="list-style-type: none"> • Conduct electricity • Ductile
13. Explain why metals are used to make pans	<ul style="list-style-type: none"> • Conduct heat • High melting point
Group 1: Alkali metals	
14. Use the periodic table to name elements in group 1	Lithium, sodium, potassium, rubidium, caesium, francium
15. State the name of group 1	Alkali metals
16. Describe the reactions of alkali metals with water	<ul style="list-style-type: none"> • Fizzing (gas produced) • Sparks/ flame • Water turns purple with universal indicator

17. Complete word equation: Lithium + water → _____ + _____	Lithium + water → lithium hydroxide + hydrogen
18. Complete word equation: Sodium + water → _____ + _____	Sodium + water → sodium hydroxide + hydrogen
19. Use the periodic table to name the most reactive element in group 1	Francium
20. Describe the trend in reactivity as you go down the group.	The reactivity INCREASES as you down the group
Group 7: Halogens	
21. Use the periodic table to name elements in group 7	Fluorine, chlorine, bromine, iodine, astatine
22. State the name of group 7	Halogens
23. Describe the properties of the group 7 elements	<ul style="list-style-type: none"> • Low melting points • Do not conduct electricity
24. Use the periodic table to name the most reactive element in group 7	Fluorine
25. Describe the trend in reactivity as you go down the group.	The reactivity DECREASES as you down the group
Group 0: Noble gases	
26. Use the periodic table to name elements in group 0	Helium, neon, argon, krypton, xenon, radon
27. State the name of group 0	The noble gases
28. What is special about elements in group 0?	They do not react
Compounds	
29. Complete the word equation: Lithium + chlorine →	Lithium + chlorine → lithium chloride
30. Complete the word equation: Sodium + chlorine →	Sodium + chlorine → sodium chloride
31. Complete the word equation: Potassium + iodine →	Potassium + iodine → potassium iodide
32. How many types of atom are in the compounds a. H ₂ O b. Al ₂ O ₃	<p>a. H₂O – 2 hydrogen, 1 oxygen</p> <p>b. Al₂O₃ – 2 aluminium, 3 oxygen.</p>
33. How many atoms are in these compounds: a. H ₂ O b. Al ₂ O ₃	<p>a. H₂O = 3 atoms</p> <p>b. Al₂O₃ = 5 atoms</p>