Oakwood Academy
A Visual Arts, Technology & Sports College

# Science- 8A

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# Basic learning in Science

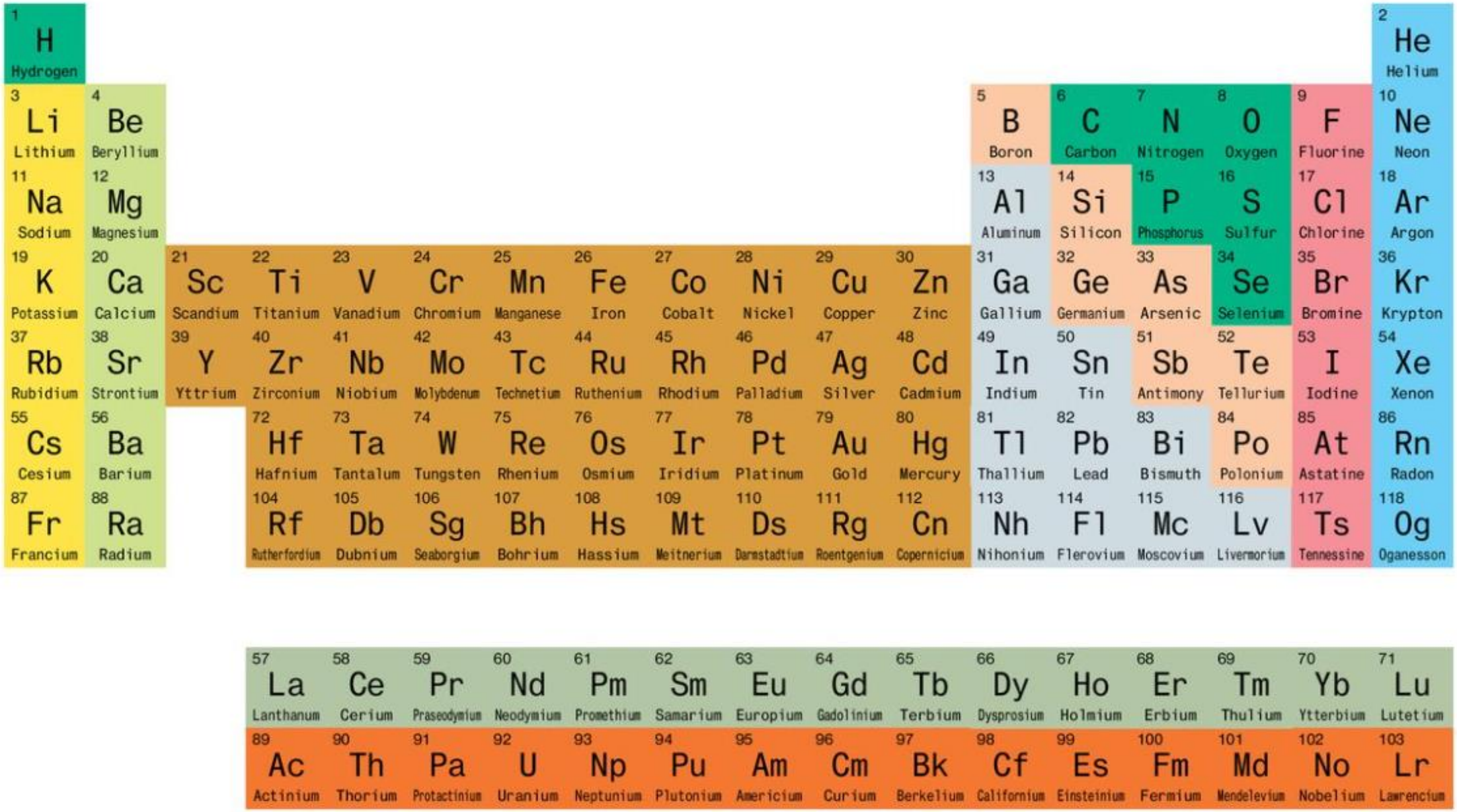
- The purpose of science teaching at Oakwood is to develop curiosity, enjoyment, skills and a growing understanding of science through an approach in which pupils raise questions and investigate the world in which they live.
- **The subject of science** seeks to engage and challenge learners at many levels, linking direct practical experience with scientific ideas. Experimentation and modelling are used to develop and evaluate explanations, encouraging critical and creative thought. Opportunities are planned for pupils to:
- Enquire, explore and observe so that they can ask questions about themselves and their environment
- Stimulate their curiosity in finding out why things happen in the way they do
- Appreciate the way science will affect their future on a personal, national and global level.

# Learning Task 1 - Science– 8A

**Pick 3 elements form the periodic table and research them. (1 page for each element)**

- Is your element a metal, semi-metal or a non-metal?
- Give the chemical symbol and name of your element.
- When was it discovered?
- Who discovered it?
- What is it used for?

Click here for a short video about the periodic table.


1 H Hydrogen
2 He Helium
3 Li Lithium
4 Be Beryllium
5 B Boron
6 C Carbon
7 N Nitrogen
8 O Oxygen
9 F Fluorine
10 Ne Neon
11 Na Sodium
12 Mg Magnesium
13 Al Aluminum
14 Si Silicon
15 P Phosphorus
16 S Sulfur
17 Cl Chlorine
18 Ar Argon
19 K Potassium
20 Ca Calcium
21 Sc Scandium
22 Ti Titanium
23 V Vanadium
24 Cr Chromium
25 Mn Manganese
26 Fe Iron
27 Co Cobalt
28 Ni Nickel
29 Cu Copper
30 Zn Zinc
31 Ga Gallium
32 Ge Germanium
33 As Arsenic
34 Se Selenium
35 Br Bromine
36 Kr Krypton
37 Rb Rubidium
38 Sr Strontium
39 Y Yttrium
40 Zr Zirconium
41 Nb Niobium
42 Mo Molybdenum
43 Tc Technetium
44 Ru Ruthenium
45 Rh Rhodium
46 Pd Palladium
47 Ag Silver
48 Cd Cadmium
49 In Indium
50 Sn Tin
51 Sb Antimony
52 Te Tellurium
53 I Iodine
54 Xe Xenon
55 Cs Cesium
56 Ba Barium
72 Hf Hafnium
73 Ta Tantalum
74 W Tungsten
75 Re Rhenium
76 Os Osmium
77 Ir Iridium
78 Pt Platinum
79 Au Gold
80 Hg Mercury
81 Tl Thallium
82 Pb Lead
83 Bi Bismuth
84 Po Polonium
85 At Astatine
86 Rn Radon
87 Fr Francium
88 Ra Radium
104 Rf Rutherfordium
105 Db Dubnium
106 Sg Seaborgium
107 Bh Bohrium
108 Hs Hassium
109 Mt Meitnerium
110 Ds Darmstadtium
111 Rg Roentgenium
112 Cn Copernicium
113 Nh Nihonium
114 Fl Flerovium
115 Mc Moscovium
116 Lv Livermorium
117 Ts Tennessine
118 Og Oganesson
57 La Lanthanum
58 Ce Cerium
59 Pr Praseodymium
60 Nd Neodymium
61 Pm Promethium
62 Sm Samarium
63 Eu Europium
64 Gd Gadolinium
65 Tb Terbium
66 Dy Dysprosium
67 Ho Holmium
68 Er Erbium
69 Tm Thulium
70 Yb Ytterbium
71 Lu Lutetium
89 Ac Actinium
90 Th Thorium
91 Pa Protactinium
92 U Uranium
93 Np Neptunium
94 Pu Plutonium
95 Am Americium
96 Cm Curium
97 Bk Berkelium
98 Cf Californium
99 Es Einsteinium
100 Fm Fermium
101 Md Mendelevium
102 No Nobelium
103 Lr Lawrencium

# Learning Task 2 – Science– 8A

**Look around your house and make a list of pure substances and mixtures.**

- Read the information and watch the video on BBC Bitesize:

https://www.bbc.co.uk/bitesize/articles/zjwhnrd

- Looking around your house at different liquids (bottles of juice, shampoo, soap etc), make two lists. One list of pure substances and one of mixtures.

Click here for a short video about pure substances and mixtures.

# Learning Task 3 – Science– 8A

Produce a biography of Humphry Davy.

**Things to include:**

1. When was he born?
2. When did he die?
3. Where was he from?
4. Where did he work?
5. What is he famous for?

Click here for a short video about Humphry Davy.

Don't forget to include a picture!

# Prompts

- What activities can parents and carers complete regularly with their children that have the most benefit?
- Think about the fundamental / basic skills or knowledge needed in your subject area? For example
  - Daily reading in English
  - Concentrating on the four operations of maths – Addition, Subtraction, Multiplication and Division
  - Promoting physical activity (PE)
  - Awareness of e safety (computing)