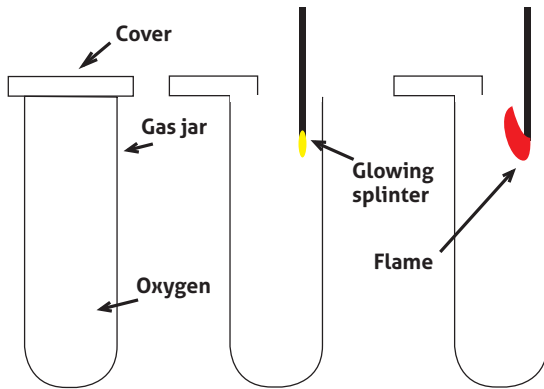


The element oxygen II

By W. A. Wickramasena

In our earlier lesson, we learnt that oxygen is a gas at room temperature. At the same time, we learnt about the method of preparation of this gas using Potassium Chlorate.

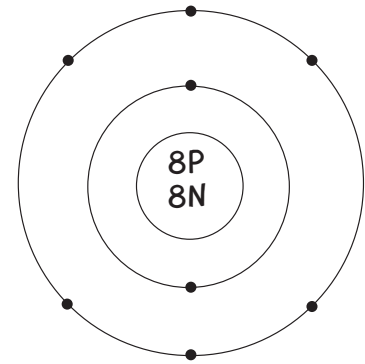
There are other compounds with which we can produce oxygen. To test whether the gas produced is oxygen, there is a simple test which can be done. It is the 'glowing splinter test'.



If a glowing splinter is introduced into the gas jar which contains oxygen, it will catch fire.

An atom of oxygen has,
8 protons
8 neutrons
8 electrons

The protons are in the nucleus with the neutrons. The electrons are in the two orbits. There are six in the outermost orbit and two in the inner orbit.



There are other compounds also, which will give out oxygen gas when heated.

Eg: Potassium Nitrate
Sodium Nitrate
Potassium Permanganate

The chemical equations for the reactions are given below.

The equations are not balanced. Balance the three equations below.

1. $\text{KNO}_3 \rightarrow \text{KNO}_2 + \text{O}_2$
2. $\text{NaNO}_3 \rightarrow \text{NaNO}_2 + \text{O}_2$
3. $\text{KMnO}_4 \rightarrow \text{K}_2\text{MnO}_4 + \text{MnO}_2 + \text{O}_2$

Some uses of oxygen are;

- ▶ For chemical reactions
- ▶ To generate energy in the bodies of plants and animals
- ▶ In welding
- ▶ For toxicity treatment
- ▶ To operate fuel engines

Win super books from



Age: 9 years and below

Word Count: 150

Topic: What is your favourite day of the week and why?

Win: Horrid Henry and the Secret Club by Francesca Simon

A battle of wits ensues when Henry and Margaret go head to head to prove once and for all who is best – the Purple Hand Gang or the Secret Club. Horrid Henry's fiendish plots will make you ache with laughter.



Write at the top of your Essay

■ Book Competition ■ Essay Topic

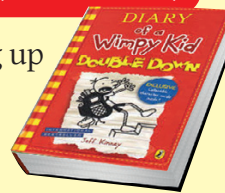
Age: 10 - 12 years

Word Count: 150 - 200

Topic: If you were offered a free vacation trip anywhere in the world where would you go and why?

Win: Diary of a Wimpy Kid – Double Down by Jeff Kinney

The pressure's piling up on Greg Heffley. His mom thinks video games are turning his brain to mush, so she wants him to put down the controller and explore his 'creative side.'



And if that's not scary enough, Halloween is just around the corner and the frights are coming at Greg from every angle.

When he discovers a bag of gummy worms, it sparks an idea. Can Greg get his mom off his back by making a movie... and will he become rich and famous in the process?

Age: 13 - 15 years

Word Count: 200 - 250

Topic: How could TV be better?

Win: N or M by Agatha Christie

It is World War II and while the RAF struggles to keep the Luftwaffe at bay, Britain faces an even more sinister threat from 'the enemy within' – Nazis posing as ordinary citizens.



With pressure mounting, the Intelligence Service appoints two unlikely spies, Tommy and Tuppence Beresford. Their mission is to seek out a man and woman from the colourful guests at Sans Souci, a seaside hotel.

Book Competition

Winners

9 years and below
A beautiful pandol I have seen
Rusaru Bositha
Mahinda College, Galle

10 - 12 years
Sightseeing during Vesak
Oshadha Wickramarachchi
Dharmaraja College, Kandy

13 - 15 years
The significance of Vesak
Jithara De Fonseka
Sri Sumangala Girls' School, Panadura

