

PRINCIPAL's NEWSLETTER

Dear Parents and Friends,

Veritas, and I trust that all is well.

College resumed for a busy second half-term and we are happy to have our students back. It is noted that the students did some extra reading whilst at home and it will be our privilege to hear their feedback at the future assemblies.

A handful of students still come to College without proper uniform or not with all their gear and books – this is a *lack of organisation*. Parents are encouraged to assist and check that their children are organised and ready for College. After all *being organised makes you happier*. Here are some *benefits* of being organised: (1) Once you get more organised, you'll have *more free-time and energy* for the things you love to do and that makes you happy; (2) organisation leads to *less stress*. It will also help with any feelings of anxiety and your mood will be boosted and wellbeing improved; (3) you will find yourself *more motivated* to want to achieve your tasks and goals and than someone who is not.

In conclusion, some quotes to make you smile, '*Think like a proton and stay positive'*.; and Oprah Winfrey said, '*Lots of people want to ride with you in the limo, but what you want is someone who will take the bus with you when the limo breaks down.*'

Be safe until we meet again.

Yours truly *Abraham. P. Swart* Principal

WHAT'S HAPPENING @JHC



In this newsletter, we are introducing you to what the students, our future scientists, are doing in *Chemistry*...and it's all about oxygen. Oxygen is a nonmetallic element found in Group VI of the periodic table. It is a colourless, odourless and tasteless gas. It is essential to living organisms which take it in for the release of energy in the body tissues. Most of the oxygen on earth comes from photosynthesis by plants. Oxygen combines with most other elements to form compounds. Its most important compound is water, H_2O .

The **Year 7 Chemistry students** decided to prepare oxygen in the chemistry laboratory as an alternative supply - to aid hospitals and medical workers to save lives in case of another worldwide emergency that may result in scarcity of oxygen.

Oxygen can be readily prepared in the laboratory by the decomposition of certain **nitrates** and **chlorates**. For example, *potassium chlorate (V)*. It can also be prepared by the decomposition of some higher oxides and peroxides. We decided to prepare our oxygen by the decomposition of hydrogen peroxide because it is quite fast and requires no heating. The decomposition of hydrogen peroxide yields water and oxygen gas. This reaction is made faster by adding **manganese dioxide** as **catalyst**. A *catalyst* is a substance that speeds up the rate of a chemical reaction.

Hydrogen Peroxide \rightarrow water + oxygen 2H₂O₂ $\frac{\rightarrow}{M_{1}O_{2}}$ 2H₂O + O₂

Materials

- o 100ml of 5% hydrogen peroxide in a 250ml beaker,
- o 10g of black Manganese dioxide in a petri dish,
- o 2 X 250ml conical flasks,
- A water trough,
- A gas jar,
- A beehive shelf,
- A thistle funnel,
- Gas delivery tubes,
- Rubber bungs,
- Wooden splints,
- Lighter.

Procedure

We put **10 grams** of **Manganese dioxide** into a **conical flask**. The conical flask was covered with a rubber stopper. A **thistle funnel** and gas delivery tube were passed through the stopper into the conical flask. Next, **50ml of 5% Hydrogen peroxide** was poured into the conical flask containing the **manganese dioxide** through the thistle funnel. There is an immediate **fizzing**, and the gas produced is passed through the delivery tube and collected over water into the **gas jar**. The filled gas jar of oxygen is covered using a **glass slip**.

Test for hydrogen

We tested the gas we produced by putting a **glowing splint** into the gas jar. The glowing splint immediately **rekindles** showing that the gas we produced is **oxygen**.

Application

So, when next there is a medical emergency and worldwide scarcity of oxygen, dial the **JHC Year 7 Chemistry group** and we will supply you with enough oxygen on the go. Together we will save lives!

Mr. Kenneth Okure taking the Year 7 students through their paces.





Contributed by Oluwafumilayo Akinbinu, Ethan Ogali & Chimdindu Mbagwu (Year 7 students)

REMINDERS

JHC XMAS EVENT

The JHC Xmas event will take place on Thursday, 8th of December 2022 (last day of the term) and we shall start at 2:00 pm. The programme is expected to finish by 4:00 pm and parents are welcome to attend.

VIRTUAL MEETING WITH PARENTS

Please note that the first one will be on Saturday, 19th November with a second one planned for term 2. Details to follow soon.

FUTURE EVENTS

Date	Event
5 th October 2022	Start of IGCSE examinations
12 th November 2022	1 st JHC Open day for Year 7 prospective parents & students
17 th November 2022	End of IGCSE examinations
19 th November 2022	Virtual Meeting with Parents
8 th December 2022	JHC Xmas Event, 2 pm until 4 pm.
8 th December 2022	End of Term 1 and start of Xmas break
9 th January 2023	School resumption and start of term 2
14 th January 2023	JHC Annual Lunch Event
21 st January 2023	2 nd JHC Open day for Year 7 prospective parents & students
28 th January 2023	1 st JHC Entrance Exams/ Admission 2022/23
4 th February 2023	2 nd JHC Entrance Exams/ Admission 2022/23
17 th February 2023	Half-term break
1 st March 2023	Start of second half-term, term 2

For more information or clarification on any matter, please feel free to contact me at, 0708 396 4440 or abraham.swart@jameshopecollege.edu.ng