

Hallo Grade 7's !!!!



How exciting to 'go to school' in your civvies every day for the next few weeks.....or even in your pyjamas!!!! AND....no one can moan at you for 'eating in class' while you work! Not to mention.....no DEMERITS!!! AND if you work well while at home....just think how many merits you will pile up all in one go when we get back to school !!!!!!

Ok.....so let's talk work. I will send you a note and an activity or two for NS, EMS and TECH work each week. The notes are summarized into easy-to-learn notes, so that you will not have to study from your text books during this time. This will allow us to work through the important content rather quickly. But of course, I am not able to get these notes printed and to you there at home during this time, therefor there is going to be a lot of skipping of pages in order to leave space to paste in these notes once we are back at school.

So please read my instructions carefully each time so that all our notes and work will be in the same, correct order that they should be.

If you did not collect all your books from school during that last week, you are going to have to ask your parents to buy you a 72 page exercise book or an exam pad, or you can use an old book from a previous year, for you to work in. We can then cut out the pages and paste them into your workbooks when we are back at school. Just remember to head all the exercises and activities you do correctly, then there will be no problem finding them later.

So, all the best as you tackle this very adult 'university' way of studying! If you have any questions about any of the work I will be sending you, you can send me a message on ClassDojo or send me an email (rodendaal@collegiate.co.za).



Lots of love



Mrs

.....scroll down, NS work follows on the next 3 pages.....

NATURAL SCIENCES

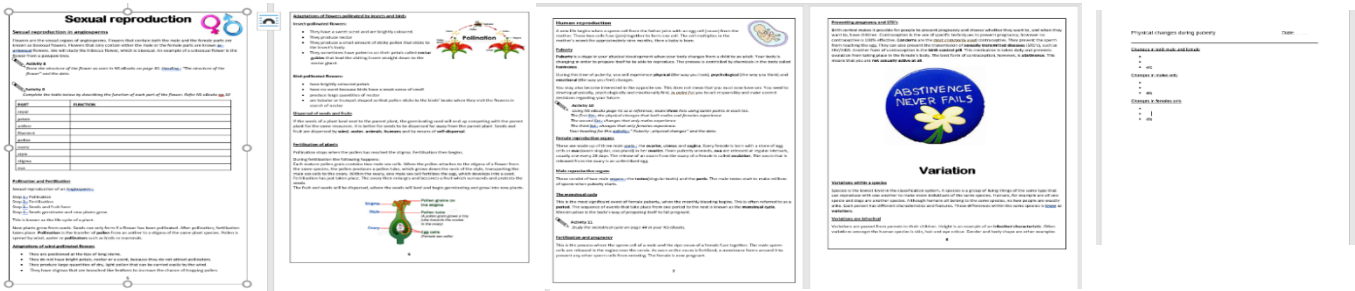
Week 1

Instruction 1

I sent work home during the first few days while we were on holiday. Some of you have already received the last notes and have done the work, as you were at school during the last week of school. Some of you were not at school. Please see which category (A – D) below that you fit into and then follow the instructions for that category.

Category A : You were at school, got the last few notes and have done the activity on Puberty.

Then the last few pages of your NS book should look like this (enlarge to see better) :



Category B : You were at school, you got the notes, pasted them in, but have not finished the activity on Puberty.

Please complete the Puberty activity on the next clean page after the last note page 8 : Heading “Physical Changes during Puberty” and the date. Then write 3 sub-headings a) Changes in both male and female b) Changes in males only c) Changes in female only, and complete these sub-headings using information in eBooks page 41. (Your book will then also look like the image I have above)

Category C : You were not at school during the last week, you did not get the notes pages 5 – 8, but you have your NS book with you.

This would mean that the last thing in your NS book is my note page 4 that you had pasted in. Please put X’s on the next 4 pages in your book, this will allow space for you to paste pages 5 – 8 when we get back to school. On the next page, after the 4 pages you have marked with an X, please do the activity on Puberty as follows: Heading “Physical Changes during Puberty” and the date. Then write 3 sub-headings a) Changes in both male and female b) Changes in males only c) Changes in female only, and complete these sub-headings using information in eBooks page 41.

Category D : You were not at school during the last week, you did not get the notes pages 5 – 8, and you do not have your NS book with you

Please use an exercise book or an exam pad and do the activity on Puberty as follows :

Heading “Physical Changes during Puberty” and the date. Then write 3 sub-headings a) Changes in both male and female b) Changes in males only c) Changes in female only, and complete these sub-headings using information in eBooks page 41.

Instruction 2

Once you have completed the above catch up work, turn to the next brand new page of your NS book. On this page, design your new theme page with the title : Matter & Materials. Remember this theme page must be drawn by hand, not done on iPads. It can be drawn landscape or portrait. See the new chapter in your eBooks for ideas on what to draw. There will be more chocolates up for grabs again for the top 3 from each class when we judge them back in class, so give me your best, colourful work.

Remember, outlining in black fine liner before colouring in is always a good idea! If you do not have your book with you, you will do this in your spare exercise book or in your exam pad.



Instruction 3

If you have your NS book, skip **6 pages** after the theme page. Put X's on each of these 6 page so that you do not write on these pages. They will be for pasting in my notes, pages 1 – 6, once we are back in class.

If you do not have your NS book with you, you will be working in your spare exercise book or exam pad.

- Scroll down to the next page and you will find Page 1 of your new notes headed “Properties of Materials”. Read, re-read and study this note and its content until you have a clear understanding of the facts. Ask your parents to explain if something does not make sense to you, or send me a message.
- Watch the following two Youtube clips (Electrical Conductivity Clip 1 and then Clip 2) that have been pushed onto page 60 on NS eBook. Here are the links just in case you did not get them on your iPad.

<https://www.youtube.com/watch?v=QZPURSF5iH4>

and

<https://www.youtube.com/watch?v=Y66PW1nlea0>

- On the next blank page (after the last X you have marked in your book) write the following heading: “Conductivity of Materials” and the date.
Re-draw this table and complete the table, basing your answers on what you saw in the videos.

Material	Conductor or Insulator?
metal	
wood	
plastic	
glass	

- If you have the time and the equipment, try and build your own simple electrical circuit using wire, a battery and a small light bulb, and do your own conductivity test on different materials in and around your house. You can video yourself doing this, I would love to see it once we are back at school, or your parents can email it to me. 😊 **Ask a parent for assistance.**

Properties of Materials

Physical properties of materials determine their suitability for a particular use

Different materials have different physical properties.

Examples of physical properties include **strength, flexibility, melting and boiling points** and **conductivity**. These properties affect its suitability for use.

Strength : The strength of a substance describes its ability to withstand a force, eg diamonds vs glass

Flexibility : The flexibility of a material describes how easily a material can be bent, eg a climbers rope vs a metal pipe

Boiling and melting points : The boiling point of a liquid is the temperature at which a substance changes from a liquid to a gas. The melting point is the temperature at which a solid changes to a liquid. All materials boil and melt at different temperatures. Since these temperatures are unique to each substance, we can measure the boiling point of a material to determine whether it is pure or not. Even adding a small amount of a different substance to the material will affect its melting and boiling points. **See table on page 62 eBook**

Electrical conductivity : An electrical **conductor** is a material that allows charge (electricity) to flow through it. Metals are excellent conductors. A material that is unable to conduct electricity is called an **insulator**. Wood and plastic are examples of insulators. Electrical wires usually consist of copper wires surrounded by a plastic coating. The copper allows the electricity to flow through it, while the plastic coating prevents us from getting shocked.

