WHITELANDS ACADEMY

Science – Y7 Term 5

What are we learning this half-term?

This half-term students will start to learn about **Reactions**. They will begin by looking at the properties of metals and their reactivities. We will then learn about acids and alkalis and how these interact in neutralisation reactions. Students will then have the opportunity to compare standard indicators to an indicator they will make.

We will then be learning about **Reproduction**. Students will learn about the female and male reproductive systems, the changes that occur during puberty, the processes of menstruation and fertilisation. They will consider the growth of the foetus throughout pregnancy and the effects of maternal lifestyle on the growing foetus. We will then consider reproduction in flowering plants.

Resources you can use at home

BBC Bitesize:

Metals: https://www.bbc.co.uk/bitesize/topics/zv9nhcw/articles/z8qrr2p
Reactivity series: https://www.bbc.co.uk/bitesize/topics/z3ksp4j/articles/z7jpsk7
Acids and Alkalis: https://www.bbc.co.uk/bitesize/topics/zn6hvcw
Reproduction: https://www.bbc.co.uk/bitesize/topics/zybbkqt

WHITELANDS ACADEMY

Optional home learning tasks

Use Look, Cover, Write, Check to learn keywords and definitions from their knowledge organisers.

Use mind mapping techniques or create question and answer flashcards to learn sections of their knowledge organisers.

Reactions Task: Rusting Investigation – Ask an adult at home before you start!

Use the instructions on the link (https://www.fizzicseducation.com.au/150-science-experiments/kitchen-chemistry-experiments/rusty-nail-experiment/) to investigate the effects of liquids on rusting of nails.

Write up your investigation to include:

Prediction – which liquid do you think will cause the rusting to happen fastest?

Equipment – write a list of the equipment you needed to use.

Diagram – draw a labelled diagram with a pencil and ruler to show how you set up your practical.

Results table – draw a table to record your observations of the nails in each liquid.

Conclusion – what did you find out? Did this match your prediction? How could you improve your investigation?

WHITELANDS ACADEMY

Reproduction Task:

John found the following data about five mammals.

mammal	average length of pregnancy (days)	average life span (years)
mouse	20	2
guinea pig	65	7
leopard	96	15
chimpanzee	250	40
whale	315	50

1) Plot a line graph of these results (see your teacher for graph paper or download some here: https://mathsphere.co.uk/downloads/graph-paper/graph-paper-5mm-squares.pdf)
2) Describe the relationship between length of pregnancy and life span. Use data from the table to evidence your description.

WHITELANDS ACADEMY

John found data about three other mammals.

mammal	average length of pregnancy (days)	average life span (years)
Human	266	72
Horse	340	25
Giraffe	440	17

3) (i) Plot these **three** points on to your graph.

(ii) Do these points fit the relationship you described in question 2? Use the graph to give a reason for your answer.

SenecaLearning. com– Students can create a free account to record their progress. They then need to add Science KS3 to their course list.
Chemical Reactions: https://app.senecalearning.com/classroom/course/419c7523-d408-4bc7-9b96-f7f12abdacae/section/cad2dd61-5d42-4fcc-a971-7e3cbd174777/session
Metals: https://app.senecalearning.com/classroom/course/419c7523-d408-4bc7-9b96-f7f12abdacae/section/75131bdd-37bf-4a90-962a-175148945903/session
Reproduction: https://app.senecalearning.com/classroom/course/419c7523-d408-4bc7-9b96-f7f12abdacae/section/36f04bf1-20a5-4cf5-b0c4-48fb0120e7fe/session