**Science work – Year 8**

The tasks to work through each week from your CGP guide and workbook from June 15th until the end of the summer term are given below. When you have attempted the questions from the workbook you should mark them using the answers at the back of the book. You will also have a short Educake test and additional online resources to help you will be available via the science home learning page on the academy website. The additional resources will be updated frequently.

**Groups: 8NSAngelou, 8NSBoyle, 8NSCurie, 8SSAngelou, 8SSBoyle, 8SSCurie**

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| **Week** | **Topic** | **CGP Guide pages** | **Workbook pages** | **Educake Test** | **Additional resources** |
| 15/6/20 | Revision and end of year assessment | p.4,19,35-38, 48-51, 79-84 | Do 2 pages out of:p.7-11, 40-44, 77-87, 104-112, 163-168 | Assessment for year 8 | You can use your revision guide or BBC bitesize to help you revise:<https://www.bbc.co.uk/bitesize/subjects/zng4d2p> |
| **Task Instructions**: *Key topics to revise are photosynthesis, respiration, atoms, elements and compounds, chemical reactions, forces and pressure. Choose your weakest area. Make flashcards on this area. Choose at least 2 question pages on this area from your workbook to complete. Your Educake test is your end of year assessment.* |
| 22/06/20 | Gas Exchange and Breathing | p.12-14 | p.25-28 | Gas Exchange and Breathing | This link will explain the respiratory system, how we breathe and why we need to breathe: <https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/2>This video clip will show you how to make a model of a lung:<https://www.youtube.com/watch?v=CBv2BqqAydE>This link will explain how the lungs are adapted for gas exchange: <https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/3> |
| **Task Instructions**: *Describe 3 ways which the lungs are adapted for gas exchange. Describe the process of breathing. Count the number of breaths you take sitting down for one minute. This is your breathing rate. Design an experiment to measure the effect of exercise on your breathing rate (you should record this in your book) – carry it out and explain what you have found. Complete pages 25-28 in your workbook. Complete Educake test.* |
| 29/06/20 | Acids, alkalis and neutralisation | p.52-53 | p.113-117 | Acids, alkalis and neutralisation | This lesson from Oak National Academy will help you understand this topic:<https://classroom.thenational.academy/lessons/acids-and-alkalis/>This link will show you how to make an indicator from red cabbage. You must not drink this and you must ask your parent’s first. <https://www.youtube.com/watch?v=OMXMlWybv8A> |
| **Task Instructions**: *Give some examples of acids, alkalis and neutral substances. Explain how an indicator can be used to determine if something is acidic, alkaline or neutral. Explain what happens when you add an acid to an alkali. Complete pages 113-117 in the workbook. You can make your own indicator using red cabbage or berries – the link will help you. Complete Educake test.*  |
| 6/07/20 | Light waves, reflection and refraction | p.87-88 | p.181-187 | Light waves, reflection and refraction | This lesson from BBC bitesize will help you understand reflection and refraction of light:<https://www.bbc.co.uk/bitesize/articles/zfc8qnb> |
| **Task Instructions**: *Make a mind map to summarise the ideas about light, reflection and refraction. Complete pages181-187 in your workbook. Write a message in mirror writing on a piece of paper – hold the message up to a mirror at the end to see if your mirror writing is correct. Complete Educake test.* |
| 13/07/20 | Colour and how we see | p.89-90 | p.188-194 | Colour and how we see | This page from BBC Bitesize explains why we have different colours of light:<https://www.bbc.co.uk/bitesize/guides/zq7thyc/revision/6> |
| **Task Instructions**: *Explain how we see an object such as a leaf. Explain why the leaf is green. Complete pages188-194 in your workbook. Cut a circle of card and divide it into 8 segments. Colour each segment – yellow, orange, red, blue, green, purple, indigo. Spin the card very fast. What colour do you see? Complete Educake test.* |

**Groups 8NSDahl, 8NSEuclid, 8NSFermat, 8SSDahl, 8SSEuclid, 8SSGolding**

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| **Week** | **Topic** | **CGP Guide pages** | **Workbook pages** | **Educake Test** | **Additional resources** |
| 15/6/20 | Revision and end of year assessment | p.4, 19, 34-35, 45-48, 76-81 | Do 2 pages out of:p.7-10, 36-39, 69-77, 94-101, 146 - 159 | Assessment for year 8 | You can use your revision guide or BBC bitesize to help you revise:<https://www.bbc.co.uk/bitesize/subjects/zng4d2p> |
| **Task Instructions**: *Key topics to revise are photosynthesis, respiration, atoms, elements and compounds, chemical reactions, forces and pressure. Choose your weakest area. Make flashcards on this area. Choose at least 2 question pages on this area from your workbook to complete. Your Educake test is your end of year assessment.*  |
| 22/06/20 | Gas Exchange and Breathing | p.11-13 | p.22-25 | Gas Exchange and Breathing | This link will explain the respiratory system, how we breathe and why we need to breathe: <https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/2>This video clip will show you how to make a model of a lung:<https://www.youtube.com/watch?v=CBv2BqqAydE>This link will explain how the lungs are adapted for gas exchange: <https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/3> |
| **Task Instructions**: *Describe 3 ways which the lungs are adapted for gas exchange. Describe the process of breathing. Count the number of breaths you take sitting down for one minute. This is your breathing rate. Design an experiment to measure the effect of exercise on your breathing rate (you should record this in your book) – carry it out and explain what you have found. Complete pages 22-25 in your workbook. Complete Educake test* |
| 29/06/20 | Acids, alkalis and neutralisation | p.49-50 | p.102-105 | Acids, alkalis and neutralisation | This lesson from Oak National Academy will help you understand this topic:<https://classroom.thenational.academy/lessons/acids-and-alkalis/>This link will show you how to make an indicator from red cabbage. You must not drink this and you must ask your parent’s first. <https://www.youtube.com/watch?v=OMXMlWybv8A> |
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| 6/07/20 | Light waves, reflection and refraction | p.84-86 | p.162-168 | Light waves, reflection and refraction | This lesson from BBC bitesize will help you understand reflection and refraction of light:<https://www.bbc.co.uk/bitesize/articles/zfc8qnb> |
| **Task Instructions**: *Make a mind map to summarise the ideas about light, reflection and refraction. Complete pages181-187 in your workbook. Write a message in mirror writing on a piece of paper – hold the message up to a mirror at the end to see if your mirror writing is correct. Complete Educake test.* |
| 13/07/20 | Colour and how we see | p.89-90 | p.188-194 | Colour and how we see | This page from BBC Bitesize explains why we have different colours of light:<https://www.bbc.co.uk/bitesize/guides/zq7thyc/revision/6> |
| **Task Instructions**: *Explain how we see an object such as a leaf. Explain why the leaf is green. Complete pages188-194 in your workbook. Cut a circle of card and divide it into 8 segments. Colour each segment – yellow, orange, red, blue, green, purple, indigo. Spin the card very fast. What colour do you see?*  |