**Science work – Year 8**

The tasks to work through each week from your CGP guide and workbook from January 11th until February half- term are given below. Complete the tasks given in your science exercise book. If you do not have your exercise book at home, complete the task on one side of a piece of paper and keep these together, ideally in a folder, ready to stick in your exercise book when you get back to school. When you complete the pages from the workbook you should mark them using the mark schemes at the back of the book. You will also be signposted to additional online resources to help you with the tasks.

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| **Week** | **Topic** | **CGP Guide pages** | **Workbook pages** | **Additional resources** |
| 11/01/21 | Diet and nutrition | Foundation - p.6-7  Higher – p.6-7 | Foundation – p.12-15  Higher – p.12-20 | The following links will take you to Oak academy lessons that explain the nutrients we need in a healthy diet and why different people need different amounts of nutrients. The second lesson will also explain how to calculate your energy requirement and the energy you obtain from food:  <https://classroom.thenational.academy/lessons/healthy-diet-part-1-6tjp2d>  <https://classroom.thenational.academy/lessons/healthy-diet-part-2-6wt6cr> |
| ***Task*** *– Draw a table showing the main food groups(nutrients), an example of where they are found and what they are needed for. Explain why different people will need to eat different amounts. Complete the workbook pages. Complete at least one Oak academy lesson.* ***Extension*** *– watch one of the BBC science lessons on BBC 2 between 1 and 3pm each afternoon this week* | | |
| 18/01/21 | Digestion | Foundation - p.8-9  Higher – p.8-9 | Foundation – p.15-18  Higher – p.16 - 20 | The following link will take you to an Oak academy lesson that explains digestion:  <https://classroom.thenational.academy/lessons/the-digestive-system-6wv30t>  The following links will take you to Oak academy lessons which explain adaptations of the small intestine to carrying out digestion and the role of enzymes in digestion.  <https://classroom.thenational.academy/lessons/adaptations-of-the-small-intestine-cgwkac>  <https://classroom.thenational.academy/lessons/enzymes-6nk62e> |
| **Task***: Draw a flow diagram of the seven main parts of the digestive system and explain what happens in each part. Complete the workbook pages. Complete at least one Oak academy lesson.* | | |
| 25/01/21 | Chemical reactions and equations | Foundation - p.45-47  Higher – p.48-49 | Foundation – p.94-99  Higher – p.104-107 and 110-112 | The following link will take you to an Oak academy lesson that explains indicators of chemical reactions and conservation of mass:  <https://classroom.thenational.academy/lessons/indicators-of-a-chemical-reaction-cct3ad>  The following link will take you to an Oak academy lesson that explains oxidation and chemical equations:  <https://classroom.thenational.academy/lessons/oxidation-6tj68d> |
| **Task***: Explain what reactants, products and chemical reactions are. Explain why mass does not change during a chemical reaction. Explain why combustion is an oxidation reaction. Complete the workbook pages. Complete at least one Oak academy lesson.* | | |
| 1/02/21 | Endothermic and Exothermic Reactions | Foundation - p.48  Higher – p.50 | Foundation – p.100-101  Higher – p.108-109 | The following clip explains what exothermic and endothermic reactions are:  <https://www.youtube.com/watch?v=3bMG-2E1h0s> |
| **Task:** *Explain the meaning of endothermic and exothermic. Sherbet dissolving in water is an endothermic process. Design an experiment to test how the mass of sherbet effects how endothermic the reaction is. If you can carry out the experiment and record your results. Complete the workbook pages. Use this week to catch up on any work not completed last week.* | | |
| 8/02/21 | Density and Pressure | Foundation - p.81  Higher – p.84 | Foundation – p.175-178  Higher – p.156-159 | This lesson from Oak Academy will help you understand density:  <https://classroom.thenational.academy/lessons/density-c8uk4c>  These lessons from Oak Academy will help you understand pressure:  <https://classroom.thenational.academy/lessons/pressure-crw3cd>  <https://classroom.thenational.academy/lessons/pressure-in-liquids-6xk6ce> |
| **Task:** *Find a definition for density and write it down.**Write down the equation for pressure. Explain how pressure increases as the depth of water increases. Upthrust causes objects to float. Try to make a model boat that will float for 5 minutes. Can you describe what is most important about the model boat design in making it float? Complete the workbook pages. Complete at least one Oak academy lesson.* | | |