

## Year 8 Summer Exam Revision Sheet 2017

Biology topics being tested in the end of year exam can be found in the textbook *Exploring Science - How Science Works 8* (published 2008). Page numbers are listed along with the topics below.

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### **8A Food, glorious food (pp. 7-20)**

For this topic, pupils should have an understanding of the following ideas:

- Nutrition labels
- Nutrients in foods
- The functions of each of the different nutrients
- Balanced diet
- Complications arising from poor diet
- The structures of the digestive system
- The role of different organs in the digestive system
- How foods are digested
- Enzymes
- How food passes from the digestive system into the bloodstream
- The structure of the villi and the role of the villi in digestion and absorption.

Pupils are also encouraged to use other resources such as BBC Bitesize. The links to the relevant pages for **diet, digestion and nutrition** are given just below:

Revision: <http://www.bbc.co.uk/education/guides/zyjx6sg/revision>

Activity: <http://www.bbc.co.uk/education/guides/zyjx6sg/activity>

Test: <http://www.bbc.co.uk/education/guides/zyjx6sg/test>

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### **8B Going for gold (pp.21-34)**

For this topic, pupils should have an understanding of the following ideas:

- What is respiration?
- The word equation for respiration
- Knowledge of reactants and products in the respiration equation
- Similarities between respiration and combustion
- The circulatory system
- Named parts of the heart and the passage of blood flow around the body
- Names of blood vessels and the type of blood they carry (oxygenated or deoxygenated)
- Aerobic respiration compared with anaerobic respiration
- Causes and effects of reduced oxygen supply to cells
- Removal of carbon dioxide from cells
- Structure of the lungs and respiratory system
- Gas exchange
- Role of the cilia on epithelial cells
- Effects of smoking on ciliated cells
- The composition of air and the differences in the percentages of gases inhaled and exhaled
- The test for carbon dioxide

Pupils are also encouraged to use other resources such as BBC Bitesize. The links to the relevant pages for **respiration, the respiratory system and gas exchange** are given just below:

Revision: <http://www.bbc.co.uk/education/guides/zq349j6/revision>

Test: <http://www.bbc.co.uk/education/guides/zq349j6/test>