**Year 9 Biology Exam Preparation**

Use this table to help you revise. Use the web pages linked to the QR codes to revise a topic and then answer the questions to the right. There are other resources on the school website

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| Topic | R | A | G | QR code | Facts I Need to Know |
| Genetics and Evolution |  |  |  |  | 1. Identify different types of environmental variation and explain the causes.
2. Identify different types of inherited variation.
3. Describe the relationship between chromosomes, genes, DNA, genetic information and nuclei?
4. Explain how organisms become endangered or extinct.
5. What is Darwin’s theory of evolution?
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| Plant Growth |  |  |  |  | 1. Explain how the rate of photosynthesis can be affected
2. What factors can limit the rate of photosynthesis?
3. Explain how substances enter and leave the plant
4. Explain how and why plants make different substances
5. How do farmers make sure their crops grow well?
6. What are the advantages and disadvantages of different farming methods?
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| Cells and Microscopes |  |  |  |  | 1. What has the development of the electron microscope allowed us to do?
2. How are animal cells different to plant cells?
3. How are some specialised cells adapted to their functions?
4. What are the functions of the sub-cellular structures in bacteria?
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| Enzymes and Transport |  |  |  |  | 1. What do enzymes do?
2. Why do enzymes only work on specific substances?
3. How is enzyme activity affected by temperature, pH and substrate concentration?
4. What is the difference between diffusion and osmosis?

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