



Taunton School 13+ Academic Scholarships

Science – sample questions

SAMPLE



You have 45 minutes to complete the paper

- Answer one question from each section
- Each answer should be in the form of a short essay (approximately one side of A4)
- Diagrams may be used to help illustrate the answers
- You should aim to include and link together a range of facts from your knowledge of the sciences
- Good essays will introduce general knowledge that has been gained from books and the media, in clear English.

Biology section

1. Why is important to have a balanced diet?
2. Briefly describe how you could monitor a population of a named garden bird species and explain the variations in population size that you might expect to find.
3. How do plants reproduce successfully?

Physics section

1. Explain how sound is produced by a loudspeaker and how it can be detected by our ears.
2. Discuss how the movements of objects in the solar system gives rise to seasons and eclipses. Use diagrams to help illustrate your answer.
3. Describe an experiment to investigate elasticity in a sample of metal wire. Include reference to your equipment, what will be measured or kept constant, safety, a sketch of the apparatus used and the expected shape of the graph of results.

Chemistry section

1. Use the particle model to write about changes of state of water and discuss the importance of this in nature.
2. Explain the factors that determine how different types of metals are used.
3. Explain the possible impacts of changes to atmospheric composition.

Please note these questions are illustrative only

