

GCSE Biology Paper 2 Topics – FRIDAY 7th JUNE 2024

Use your Y9, Y10 & Y11 exercise books , the online textbook and resources on Kerboodle & Educake to help you revise

Biological Responses

The Human Nervous System

1. Principles of Homeostasis
2. Structure & Function of the Nervous System
3. Reflex Actions
4. The Brain
5. The Eye
6. Common Problems of the Eye

Hormonal Coordination

1. Principles of Hormonal Control
2. The Control of Blood Glucose Levels
3. Treating Diabetes
4. *The Role of Negative Feedback (HT)*
5. Human Reproduction
6. *Hormones & the Menstrual Cycle(HT)*
7. The Artificial Control of Fertility
8. *Infertility Treatments (HT only)*
9. Plant Hormones & Responses
10. *Using Plant Hormones (HT only)*

Homeostasis in Action

1. Controlling Body Temperature
2. Removing Waste Products
3. The Human Kidney
4. Dialysis – an Artificial Kidney
5. Kidney Transplants

Genetics & Evolution

Reproduction

1. Types of Reproduction
2. Cell Division in Sexual Reproduction

3. The Best of Both Worlds
4. DNA & The Genome
5. DNA Structure & Protein Synthesis
6. *Gene Expression & Mutation (HT only)*
7. Inheritance in Action
8. More about Genetics
9. Inherited Disorders
10. Screening for Genetic Disorders

Variation & Evolution

1. Variation
2. Evolution by Natural Selection
3. Selective Breeding
4. Genetic Engineering
5. Cloning
6. Adult Cell Cloning
7. Ethics of Genetic Technologies

Genetics & Evolution

1. The History of Genetics
2. Theories of Evolution
3. Accepting Darwin's Ideas
4. Evolution & Speciation
5. Evidence for Evolution
6. Fossils and Extinction
7. More about Extinction
8. Antibiotic Resistant Bacteria
9. Classification
10. New Systems of Classification

Ecology

Adaptations, Interdependence & Competition

1. The Importance of Communities
2. Organisms in their Environment

3. Distribution & Abundance
4. Competition in Animals
5. Competition in Plants
6. Adapt & Survive
7. Adaptations in Animals
8. Adaptations in Plants

Organising an Ecosystem

1. Feeding relationships
2. Materials Cycling
3. The Carbon Cycle
4. Rates of Decomposition

Biodiversity & Ecosystems

1. The Human Population Explosion
2. Land & Water Pollution
3. Air Pollution
4. Deforestation & Peat Destruction
5. Global Warming
6. *The Impact of Change (HT only)*
7. Maintaining Biodiversity
8. Trophic Levels and Biomass
9. Biomass Transfers
10. Factors Affecting Food Security
11. Making Food Production Efficient
12. Sustainable Food Production

Required Practicals

1. Investigate the effect of a factor on human reaction time
2. Investigate the effect of light or gravity on the growth of newly germinated seedlings
3. Measure the population size of a common species in a habitat
4. Investigate the effect of temperature on the rate of decay of fresh milk.