Beyond AGS

Or just continue to develop an interest in biology and develop life-long learning.

Biology related careers...

- **Botanist**
- Criminologist
- Dentist
- Dietician
- Doctor
- **Ecologist**
- Gardener
- Microbiologist
- Nurse
- Pharmacologist
- Physiotherapist
- Vet
- Zoologist
- Nutritionist

Continuing to study a biology related course...

Biomedical science

- Microbiology
- Zoology Marine biology
- Pharmacy
- Dentistry
- **Ecology**
- Nursing
- Biotechnology
- Genetic engineering
- Veterinary
- Food technology
- Neuroscience
- Molecular biology
- Nutritional biology
- Medicine

8B-Genome Projects and 8A-Mutations and 6B-Nervous Gene Technologies Gene Expression

-Mutations 6C-Homeostasis -Nervous systemesponse -Hardy W -Cancer -Glycose -Muscle -Plants and principle -Genome projects -Amplifying fragments -Cancer -Muscle -Glucose -DNA Technology -Stem Cells -Osmoregulationcontraction -Epigenetics -The kidneys -Gene therapy/medical

Biology Learning Journey

coordination

-School---

Anthony Gell

6A-Stimuli 7B-Populations and and Evolution -Hardy Weinberg animals

Speciation

control

Genetics 7C-Population in Ecosystems -Variation, -Succession and -Heart rate Selection,

conservation 5b - Energy Transfer and Nutrient Cycles

> 5A-Respiration -Aerobic -Anaerobic

5A-Photosynthesis -Light dependent -Light independen -Limiting Factors

2A-Cell Structure and 2B-Transport 1B-More Biological olecules molecules ars

Division across cell ars -Eukaryotic cells membranes saccharide DNA, RNA -Prokaryotic cells 2C- Cells and the ds, Protein-Water and inorganic immune System incs ions -34 Gas Eychanga 3A-Gas Exchange Synthesis -Mitosis Systems

Exchange/Transport Selection
Systems Statistics for Biologous Systems -t-test immune System 4A-DNA,RNA,Protein-Chi-squared

-Spearmans rank correlation

4B-Diversity and

B8: Transport Systems Efficient

transport and exchange Circulatory

> system The heart Respiration

B7 Animal Coordination, Control and Homeostasis

- Thermoregulation
- Kidneys

Endocrine system

- Osmoregulation
- Menstrual cycle
- **Diabetes**

B9b: Ecosystems

- Parasitism/Mutualism
- Conservation
- Food security
- Cycles
- **Pollution**
- Rates of decomposition

B6b: Plant Structures

- Plant structure
- and functions Transpiration
- Translocation Plant hormones

Interdependence Sampling

B9a: Ecosystems Levels of organisation

B6a: Plant Structures

Photosynthesis **Limiting factors**

B2: Cells and Control

- Mitosis
- Growth Stem cells
- Nervous system
- The brain

B3: Genetics

- Meiosis
- DNA Inheritance
 - Protein synthesis Mutations

B4: Natural Selection Darwin and evolution

- Classification
- Selective breeding
- Geneticengineering Tissue culture

B5: Health and Disease Pathogens Immune response

- **Immunisation**
- Antibiotics

Developing new medicine Plant diseases

B1: Key Concepts in Biology

- Eukaryotic cells Prokaryotic cells
- Microscopes Enzymes Transportin

B15: Conservation and

- Human impact Sustainability
- sustainability

B14: Evolution

- Explaining evolution
- Kingdom, domains and subcellular evidence.

B13: Cellular respiration

- Darwin and evolution Classification
- Selective breeding
- Geneticengineering
 - Tissue culture

B12: Photosynth sis and plant nutrition

- **Photos yn thesis** Plant nutrition
- **Diffusion** and
- roots
- Leafstructure

Xyl em vessels

- B7: Body system Respiratory
- Digestive Circulatory
- B6: Working together
- Cells to organs Specialised cell
- Skeleton Joints/muscles
- **B5: Health**
 - and disease Health

Diet

Disease Pathogens.

<u>Exerci</u>se

B4: Variation Species variation and the cell

Inherited

va ri a tion

va ri a tion

Environmental

Variation graphs

B3: Diffusion

membrane

Cell

- **B2: Inheritance B1: Cells**
- and the genome Life Chromosomes Animal cells
- membrane Diffusion • Diseases

B8: Animal growth and

reproduction

Contrace ption

Pregnancy

reproduction

Human

Genes/ DNA • Plant cells Inheritance • Microscopes

B9: Plant reproduction

Germination

Plant reproduction

Flowers, pollination

and seed dispersal.

B10: Classification Classifying

- organisms
- The five kingdoms Fossil evidence

B11: Interdependence Ecosystems

- Adaptations
- Feeding relationships

Primary School Plants and reproduction

- Life cycles
- Life process of reproduction Change in humans over time
- Nutrition Skeleton and muscles
- Classification
- Digestive systems Food chains, including producers, predators and prey
- Human circulatory system Impact of diet, exercise, drugs and
- lifestyle on body function Fossil evidence showing changes over
 - Variation between parent and offspring
- Animal and plant environmental adaptations and how this can lead to evolution.