



# Learning Journey Map –Y11 biology separates

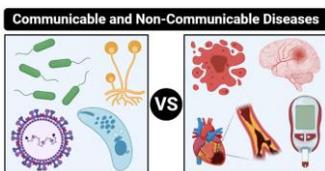
## Developing the scientific skills to be an informed citizen



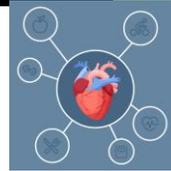
# OCR

Oxford Cambridge and RSA

Year 11 Survival Top Tips	
<b>Tip 1</b>	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
<b>Tip 2</b>	Use ' Youtube- e.g. myGCSE, MrExham to help review key skills and concepts
<b>Tip 3</b>	Use GCSE Bitesize/Kerboodle resources/past OCR questions
<b>Tip 4</b>	Use the Pixl Resources on Firefly & therapy questions
<b>Tip 5</b>	Read online science news, watch science documentaries



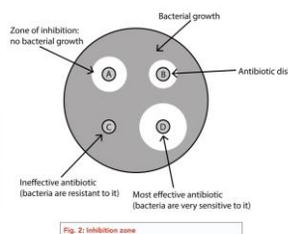
- B6 Global challenges:**
- B6.3 Part 2 Monitoring & maintaining health**
- Non-communicable diseases e.g. CVD, cancer, bronchitis, diabetes
  - Life-style factors
  - Use of stem cells & gene technology in medicine
  - Potential of the human genome project & medicine



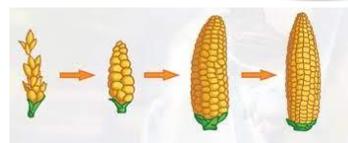
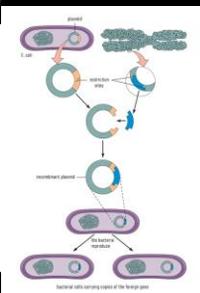
Move on to A level  
★★★★★  
Next Level  
★★★★★



- B6 Global challenges:**
- B6.3 Part 1 Monitoring & maintaining health**
- Health & disease
  - Communicable diseases
  - Transmission, detection & treatment of human & plant infections
  - Physical non-specific defenses
  - The immune system
  - Vaccines & medicines
  - Monoclonal antibodies
  - PAG- microbiology -aseptic technique

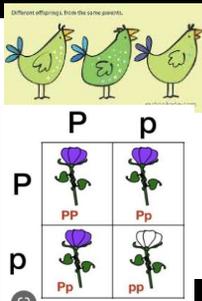


- B6.2 Feeding the human race**
- Biological factors affecting food security
  - Agricultural solutions to the demands of the growing human population
  - Selective breeding of plants & animals
  - Genetic engineering
  - Gene technology & biotechnological solutions



**B5 Genes, inheritance & selection:**

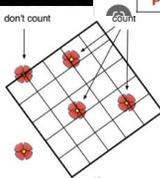
- B5.1 Inheritance**
- Genetic terminology
  - Variation
  - Mutations
  - Asexual & sexual reproduction
  - Meiosis
  - Inheritance- genetic crosses



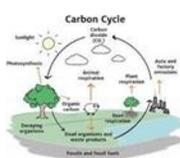
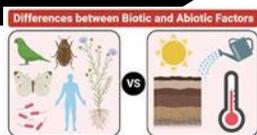
- B5 Genes, inheritance & selection**
- B5.2 Natural selection & evolution**
- Classification
  - Evolution through natural selection
  - Evidence for evolution
  - Work of Darwin & Wallace



- B6 Global challenges:**
- B6.1 Monitoring & Maintaining the environment**
- Distribution & abundance of organisms
  - PAG- sampling techniques
  - Human impact on biodiversity
  - Conservation & Ecotourism
  - Pollution & bioindicators



- Review of summer learning**
- B4 Community level systems:**
- B4.1 Ecosystems**
- Biotic & Abiotic factors
  - Competition & interdependence
  - Trophic levels
  - Pyramids of biomass
  - Decomposition
  - Water, Carbon & Nitrogen cycles



CURRICULUM OVERVIEW

**Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, as well as analysing & evaluating results**

Possible careers  
 Research scientist    Biologist    Doctor    Nurse    Forensic scientist  
 Ecologist    Farmer    Athlete    Nutritionist    Sports scientist  
 Personal trainer    Biochemical engineer    Civil Engineer  
 Paramedic    CSI    Police officer    and many more!!

**CURRICULUM OVERVIEW**