|  |  |  |
| --- | --- | --- |
| **What will we be learning?****GCSE Unit:** **Infection and Response** | **Why this? Why now?****GCSE Course:**AQA Separate Biology**What other GCSE Science units does this unit relate to?****Cells** – 4.1.1 prokaryotes and bacteria structure, 4.1.2 cell division**Organisation** – 4.2.2.6 non-communicable disease, 4.2.2 blood**Inheritance, Variation and Evolution** – 4.6.3.4 resistant bacteria**Ecology** – 4.7.1 adaptations, 4.7.2 decomposition | **Key Words:**communicable diseasesmicroorganismspathogensbacteriavirus protistfungibinary fissionantibioticspainkillersvaccinationimmunityantibiotic resistancemalariavectorimmune systemphagocytelymphocyteantibodyantigenantitoxinpre-clinical testingclinical testingplacebodouble blind trialspenicillinmonoclonal antibodieshybridoma cell |
| **What will we learn?****Useful equations/formulae/maths skills for this unit:**Interpreting graphs and data on diseasesCalculating cross-sectional areas of colonies on petri dishes using 𝜋r2**Misconceptions in this topic**Self isolating prevents all infectious disease – no, only works for infectious diseases that are passed form person to person contact or are airborne.Antibiotics kill viruses as well as bacteria – no, antibiotics only work on bacteria as they can not enter cells where viruses reproduce.Bacteria make you ill – no, it is the waste and toxins they produce when they reproduce that make you ill and not all bacteria are harmful. |
| **What opportunities are there for wider study?****If you are interested in this unit, what careers does it relate to?**pharmacist, immunologist, doctor, nurse, paramedic, epidemiologist, environmental health officer, public health, NHS and medical careers, dentist, gardener, horticulturist, botanist, microbiologist, veterinarian**Collins Revision guide relevant pages for this unit:**P.34-41, 64-67 and 94-97 |
| **How will I be assessed?****Deep Marking Task Title for this unit:** Human Immune System – Leaflet for patients |