Foxford Learning Plan

KS4

Biology

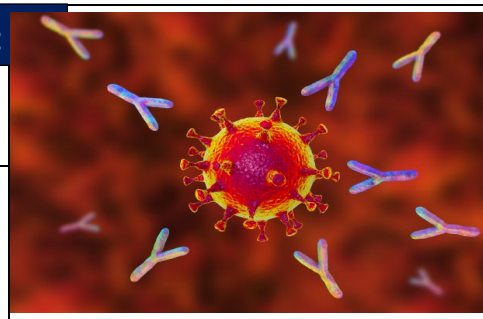
Infection and response

Key Vocabulary

Antigens	Markers on the surface of cells that identify a pathogen as foreign.
Vaccination	Dead/weakened or inactive pathogen injected into blood. Stimulated white blood cells to make correct antibody to destroy pathogen. Also creates memory cells. Antibodies therefore made quickly on re-infection.
Antibodies	Attach to antigens on a specific pathogen and cause the pathogen to clump together.
MRSA	Strain of bacterium that developed due to a mutation.
Toxins	Poisonous chemicals that cause the body harm.
Pre-clinical trials	Drug tested on animals, human cells and tissues.
Antitoxins	Chemicals that neutralise the effects of toxins.
Phagocytosis	Pathogen antigens identified by white blood cell. White blood cell engulfs (surrounds) pathogen. White blood cell then ingests (takes in) pathogen and digests it (breaks it down).
Toxins	Poisonous chemicals that cause the body harm.

Key Skills

Over the course of the topic, I will be able to:
Interpret vaccination data and deaths.
Use diagrams to support explanations.
Understand and interpret data on clinical trials.
Use flow charts to explain processes in clinical trials.
Use evidence to make conclusions from trials to debate and discuss the purpose of a vaccination system.





I will Understand

1. The main differences between bacteria and viruses.
2. How the spread of disease can be reduced or prevented
3. How a vaccine works to prevent disease
4. The effects of deforestation on further drug discovery.
5. The process of monoclonal antibody production.