# **Summary – Microbiology**

## Types of Micro-organisms

Micro-organisms (microbes) are **tiny creatures** that are individually **too small to be seen** without the help of a microscope. The **three main types** of micro-organisms are **bacteria**, **fungi** and **viruses**.

#### **Bacteria and Viruses**

Bacteria reproduce by multiplication. The can double in their numbers every 20 minutes. A group of bacteria on a petri dish is called a community or colony. Viruses cannot be seen under any normal light microscope because they are the smallest of the micro-organisms.

### Fungi

Fungi prefer **damp** and **warm** conditions. A fungus called yeast can be used to produce alcohol and bread in a process called fermentation.

### **Diseases**

Our bodies have many ways of stopping microbes from entering, our **biggest barrier** against infection is our **skin**. If we do get ill our immune systems are able to kill off the bacteria or virus. We have **special cells** which help get rid of bacteria and viruses called **white blood cells**.

# **Decomposition**

**Fungi and bacteria** feed on many different substances. They do this to get energy. In this process the food is broken down, this is also known as **decomposition**. Through the process of decomposition organic waste can be recycled to produce **fertiliser**.

# **Biological Weapons**

Sadly, biological agents can be used in **warfare**. The three main groups of biological agents are **toxins**, **bacteria** and **viruses**. An example of a bacteria used in bioterrorism is **anthrax**.

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