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Rhizoids: like plant root hairs, made of small branching hyphae, absorb nutrients

Not free-living, live in host cells

Free-living, found almost everywhere

Fungi: ~ 100µm

Viruses: ~100nm

Bacteria: ~ 2µm

Relative Sizes

Cell membrane: lines the inside of the cell wall

Cell wall: made of peptidoglycan, maintains bacteria’s shape

Fungi

Sporangiophore: filamentous stalk supports sporangium

Sporangium(a): spore producing body

DNA or RNA: genetic material, contained in chromosomes

Pathogens are organisms capable of causing disease in humans. There are several types of pathogen, which vary in structure and biology. It is important to understand these differences, so we can treat each type of disease appropriately.

Plasmid: small circle of extra DNA



Spores: microscopic particles that allow fungi to reproduce

Envelope: a double layer of phospholipids which helps avoid the immune system

Envelope glycoproteins: viral or host proteins which bind to host cells

Capsid: double layer of phospholipids which protects the genetic material

Nucleoid region: area containing the chromosomes (no membrane)

Cytoplasm: most chemical processes occur here, controlled by enzymes

Chromosomes: genetic material, made of DNA

Ribosome: site of protein synthesis

Flagellum: whip-like tail for movement

**Types of Pathogen**

Bacteria:

Cilia: small hair-like structures for movement or sticking to surfaces

Viruses:

x50

x1000

x20