**Biodiversity**

* The variety of life on Earth, including:
* The number of different species
* The range of different types of organisms, eg plants, animals and microorganisms
* The genetic variation between organisms within the same species

**Classification**

* So how do we group something as diverse as all the living organisms on Earth?
* **Group according to similarities and differences:**
* Physical features (flowers in plants/skeletons in vertebrates)
* DNA

**Order of classification**

* Species all grouped into five **KINGDOMS**:
* *Bacteria, fungi, algae, plants, animals*
* Each kingdom is divided into more **groups**:
* *Animals grouped into: mammals, birds, reptiles, amphibians, fish*
* These groups are further divided until you get down to a **species**
* **As you go down these groups, the number of type of organism in each group DECREASES, but the number of characteristics that the organisms have in common INCREASES**

**How can classification help?**

* The classification of living and fossil organisms can help to:

a. Make sense of the enormous diversity of organisms on Earth

b. Show the evolutionary relationships between organisms

**Why is it important to maintain biodiversity?**

* Stops species from becoming extinct
* More plants we have the more resources there are
* More plants we have the more medicines can be discovered
* More species there are more food in food webs for other species