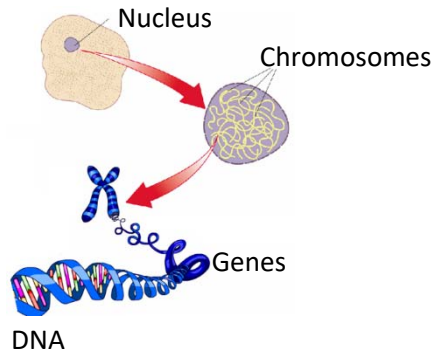


B. Genetic materials



C. Natural selection

1. Organisms in a species show variations which is caused by differences in their genes.
↓
2. The organisms with the characteristics that are best adapted to the environment survive and reproduce. Less well adapted organisms die.
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3. Genes from successful organisms are passed to the offspring in the next generation. This means the offspring are likely to possess the characteristics that made their parents successful.
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4. This process is then repeated many times. Over a period of time this can lead to the development of a new species.

A. Key Terms:

| | |
|---------------------------|--|
| Allele. | Alternative forms of the same gene. |
| Biodiversity. | The variety of living things in an area. |
| Chromosomes. | Long strand of DNA that contains many genes. |
| Competition | When two or more living things struggle against each other to get the same resource. |
| DNA. | Chemical that contains all the information needed to make an organism. |
| Evolution. | Theory that the animal and plant species living today descended from species that existed in the past. |
| Extinction. | When no more individuals of a species remain. Can be global or in an area. |
| Gene bank. | A store of genetic samples, used for research and to try and prevent extinction. |
| Genes. | Section of DNA that contains the information for a characteristic. |
| Natural selection. | Process by which the organisms with the characteristics that are most suited to the environment survive and reproduce, passing on their genes. |
| Population | Group of organisms of the same kind living in the same place. |