# Evidences Evolution

**Key words to know:**

- Homologous Structures
- Analogous Structure
- Vestigial Structures
- Fossils
- Embryology
- Genetic Similarities

**Types of Evidence:**

- _____: remains of dead organisms
- **Comparative Anatomy**: Homologous and Analogous Structures
- **Genetic Similarities**: likeness of _____ sequence
- _____: embryo development (ex. vertebrates)

**Fossil Evidence**: Relative dating where older fossils are found _____ and newer organisms are shallow.

_____ fossils are evidence of a species changing from one to another.

**Embryological Evidence**: Early in development, human embryos and embryos of all other _____ are very similar, which suggests that all vertebrates are related

**Comparative Anatomy:**

**Homologous structures**: Body structures on different organisms that are _____ in *structure (same bone structure)* and evolved from a **common ancestor**.

**Analogous structures**: Body structures on different organisms that are similar in _____ but did not evolve from the same ancestor *(bird wing and butterfly wing)*

**Genetic Similarities:**

Nearly all organisms have _____ and many proteins and enzymes

The DNA (_____) of closely related organisms looks very similar *Ex. Humans and Gorillas have 1 amino acid difference for the Hemoglobin Gene*

# Evidences Evolution (key)

**Key words to know:**

- Homologous Structures
- Analogous Structure
- Vestigial Structures
- Fossils
- Embryology
- Genetic Similarities

**Types of Evidence:**

- Fossils: remains of dead organisms
- **Comparative Anatomy:** Homologous and Analogous Structures
- **Genetic Similarities:** likeness of DNA sequence
- Embryology: embryo development (ex. vertebrates)

**Fossil Evidence**: Relative dating where older fossils are found deeper and newer organisms are shallow.

Transitional fossils are evidence of a species changing from one to another.

**Embryological Evidence**: Early in development, human embryos and embryos of all other chordates/vertebrates are very similar, which suggests that all vertebrates are related

**Comparative Anatomy:**

**Homologous structures**: Body structures on different organisms that are similar in *structure (same bone structure)* and evolved from a **common ancestor**.

**Analogous structures**: Body structures on different organisms that are similar in function but did not evolve from the same ancestor *(bird wing and butterfly wing)* (flight)

**Genetic Similarities:** (some only RNA) Virus

Nearly all organisms have DNA and many proteins and enzymes

The DNA (sequence) of closely related organisms looks very similar *Ex. Humans and Gorillas have 1 amino acid difference for the Hemoglobin Gene*