

Evidence Of Evolution (p. 283 – 287)

I. The Fossil Record

1. Define the term fossil.

Fossil –

2. Circle the letter of the sentence that is incorrect concerning fossils.

- a. Fossils of animals show a pattern of development from ancestors to descendants.
- b. The fossil record offers no evidence that evolution takes place.
- c. Change over time can be seen in the fossil record.
- d. The fossil record is incomplete.

3. The Earth is about 4.5 million years old.

Circle One : True False

4. What is the best environment to search to find fossils?

5. Which type of organism has a better chance of fossilizing?

Circle One : Soft-bodied Hard-bodied

6. Define the term paleontologist.

Paleontologist –

7. How do paleontologists develop an orderly picture of an organism's evolution?

II. Anatomy & Development

1. Define the term homologous structures.

Homologous Structures –

2. List three examples of homologous structures in mammals.

1. _____ 2. _____ 3. _____

Name _____

3. Define the term vestigial structures.

Vestigial Structures –

4. List three examples of vestigial structures in animals.

1. _____ 2. _____ 3. _____

5. How is embryology used as form of evidence supporting evolution?

III. Biological Molecules

1. Which type of ancestor exhibits greater amino acid sequence differences?

Circle One : More Recent More Distant

2. Are protein patterns always a reliable measure of evolutionary trends?

Circle One : Yes No

3. What is used a valid measure of genetic evolution in a species?

4. List three chemical compounds found in nearly all organisms. (Not in the book.)

1. _____ 2. _____ 3. _____

IV. Geographic Distribution Of Living Things *(Not in the book.)*

1. Circle the letter of the way Darwin explained the distribution of finch species on the Galapagos Islands.

- a. They had descended with modification from a common mainland ancestor.
- b. They had descended with modification from several different mainland ancestors.
- c. They had remained unchanged since arriving on the Galapagos from the mainland.
- d. They had become more similar to one another after arriving on the Galapagos.

2. How did Darwin explain the existence of similar but unrelated species?
