

## Investigation 4: Fossils through Geologic Time

### This investigation will help you to:

- Learn more about species.
- Learn more about the fossil record.
- Learn more about stratigraphic correlation.
- Learn more about dating rocks.

To learn more about species, visit the following web sites:

What are species and sub-specific taxa?, **University of Toronto**

Visit this online library resource to obtain information on distinguishing organisms from one another. Learn the taxonomic identification beginning with species, continuing through subspecies, varieties, and forma. This site primarily focuses on the taxonomy of vascular plants.

The Precambrian and Vendian Mass Extinctions, **Hooper Virtual Paleontological Museum**

Learn about two mass extinction events that affected life's earliest organisms.

Mass Extinction, **National Geographic**

A brief discussion on mass extinction rates, human impact on extinctions, and the effects of endemic and introduced species.

To learn more about the fossil record, visit the following web sites:

Evolution and the Fossil Record, **American Geosciences Institute (AGI)**

Explore this online publication to learn more about evolution and the fossil record.

Taxonomy, Transitional Forms, and the Fossil Record, **Kansas State University**

Visit this site to learn more about the benefits and limitations of the fossil record.

To learn more about stratigraphic correlation, visit the following web sites:

Sequence Stratigraphy Terminology, **SEPM**

This university's web site offers an online glossary of terms, illustrations, and links related to stratigraphy.

Sequence Stratigraphy Animated GIFS, **SEPM**

This location provides animated GIF files describing various stratigraphic processes.

Index Fossils, **USGS**

Learn why index fossils are useful to stratigraphers in correlating relative time scale and view some of the most common index fossils through time.

To learn more about dating rocks, visit the following web sites:

Fossils, Rocks, and Time, **USGS**

Learn about the relative and numeric time scales, rocks and layers, fossils and rocks, and fossil succession.

Relative Time Scale, **USGS**

Visit this site to learn more about the human history of establishing the relative time scale for Earth history. Diagrams illustrate

how strata are used as a scale.

Evolution and the Fossil Record, **AGI**

This online resource provides information on the absolute dating of rocks using biostratigraphy and radioactivity. It also offers graphs and pictures to aid your understanding of rock dating.

Relative Age Dating Using Fossils, **Texas A&M University**

A lesson using fossil data to determine relative ages of cores.

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