Grade Level/Course:
Grade 7 Life Science

Lesson/Unit Plan Name:
Chapter 7 Evolution Card Sort

Rationale/Lesson Abstract:
Evolution vocabulary building, students identify and share vocabulary meaning.

Timeframe:
10 to 20 minutes

Standard(s):

Evolution

3. Biological evolution accounts for the diversity of species developed through gradual processes over many generations. As a basis for understanding this concept, students know:

a. both genetic variation and environmental factors are causes of evolution and diversity of organisms.

b. the reasoning used by Darwin in making his conclusion that natural selection is the mechanism of evolution.

c. how independent lines of evidence from geology, fossils, and comparative anatomy provide a basis for the theory of evolution.

d. how to construct a simple branching diagram to classify living groups of organisms by shared derived characteristics, and expand the diagram to include fossil organisms.

e. extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient for its survival.

Instructional Resources/Materials:

Optional: Prentice Hall 2008 Focus on Life Science text

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- *Paper cutter or scissors to cut out cards.*
- *Evolution vocabulary cards* – printed (class set) Enough for each student (See card sort below)
- Cut up cards, may be laminated for future use.

Activity/Lesson:

Each student takes an evolution vocabulary card and searches for the student with the matching definition.

Once a match is found, students sit down together and write out definitions. These can be added to a yearlong vocabulary booklet.

There are several ways to have students pair up. Students can work in pairs, search for their match or mix and match in table groups.

Assessment:

1. **Oral check at the end of class "Who can give me a definition of ……."**
2. **Students write a summary using vocabulary words.**

species		A group of organisms that are physically similar and can mate with each other and produce offspring that can also mate and produce
fossil		The preserved remains or traces of an organism that lived in the past
adaptation		A behavior or physical characteristic that allows an organism to survive or reproduce in its environment
evolution		The gradual change in a species over time

scientific theory		A well-tested concept that explains a wide range of observations
natural selection		A process by which individuals that are better adapted to their environment are more likely to survive and reproduce than others of the same species
variation		Any difference between individuals of the same species
comparative anatomy		The comparison of the structures of different organisms

homologous structures		Body parts that are structurally similar in related species
petrified fossil		A fossil formed when minerals replace all or part of an organism
mold		A type of fossil formed when a shell or other hard part of an organism dissolves, leaving an empty space in the shape of the part
cast		A type of fossil that forms when a mold becomes filled with minerals that then harden

paleontologist		A scientist who studies fossils
gradualism		The theory that evolution occurs slowly but steadily
punctuated equilibria		The theory that species evolve during short periods of rapid change
habitat		The specific environment that provides the things an organism needs to live, grow, and reproduce

extinct		A word used to describe a species if no members of that species are still alive
classification		The process of grouping things based on their similarities
taxonomy		The scientific study of how living things are classified
binomial nomenclature		The system for naming organisms in which each organism is given a unique, two-part scientific name

genus		A classification grouping that consists of a number of similar, closely related species
prokaryote		An organism whose cells lack a nucleus and some other cell structures
eukaryote		An organism whose cells contain nuclei
branching tree diagram		A diagram that shows how scientists think different groups of organisms are related

shared derived characteristic		**A characteristic – usually a homologous structure – shared by all organisms in a group**