Evolutionary Trees

Summary

Students will place imaginary fossils in sequences that show patterns of evolution or evolutionary trees. They will investigate the two major hypotheses on how evolution takes place: gradualism and punctuated equilibrium.

Main Core Tie

Science - Biology

Standard 5 Objective 2

Time Frame

1 class periods of 70 minutes each

Group Size

Small Groups

Materials

- student worksheet
  (attached)
  per group:
  marker
  - one rock sequence diagram
    (attached)
    one set of imaginary fossils (attached)
    scissors
    tape
    meter stick

Instructional Procedures

Gather the materials and place students in groups of 3-4.
Hook activity-Show students a picture of horse evolution from: or similar photo showing changes in horse size and toe changes. If you have not discussed species or where fossils are formed and found, this may be necessary.
Discuss the reasons the horse may have evolved the way it did. Talk about how the horse "tree" branched off from the donkey tree in the past.
Read student page with students and describe where materials are and how important it is to read the directions, step by step.
Allow time for students to work. Post their results on the wall and discuss them as a class. Each group should select a member to explain their reasoning.

Extensions

A logical follow up to this activity would be to have students research the fossil record of an organism they are interested in. They could draw or cut and paste off the internet an evolutionary tree for the organism.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans