

Layers of Change (Horse Fossils)

Summary

Students match horse fossils to their time periods and pictures to emphasize, the concept that more recent rock layers are more likely to contain fossils that are similar to existing species than are older layers

Time Frame

1 class periods of 60 minutes each

Group Size

Pairs

Materials

- [student sheet](#) (attached)
- envelopes containing a [set of pictures, dates and horse leg fossils](#) (attached). All items need to be cut away from one another.

Student Prior Knowledge

Students should already be familiar with the law of superposition and have an understanding that the fossil record shows that organisms have changed over time.

Instructional Procedures

1. Hook activity

-- Perhaps show a video that would lead to discussion about how modern horses are bred to perform different tasks and that they look different from their primitive ancestors

Read the introduction on the student sheet with the students.

Explain the procedures to students to match their pictures and dates.

When the students have shown you their work, have them fill in their data table and answer the analysis questions.

Assessment Plan

Scoring Rubric

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- | | |
|------------------------------------------------|---|
| 1. Foldable neat, followed all directions..... | 4 |
| 2. Answered questions correctly..... | 4 |
| 3. Conclusion displays learning goal..... | 4 |

Analysis question answers:

Horses are bigger, have a central toe that is larger than the others and have changed in shape. An individual horse did not change but may have been more successful and had more offspring with the successful traits.

Animals in the top layers are more recent ancestors.

The hoof may be more successful on rough or hard ground.

More abundant food or better success moving to it.

A variety of answers are possible, faster, jump higher, look pretty, good temperament.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)