

SURVIVAL 101: OUT RUN; OUT CHANGE; OUT LAST

GRADE LEVELS 7th, 9th-12th

DESCRIPTION

How did animals of today develop with similar biological traits to those of their ancestors? Which species outlived another? Students will examine fossil records through geologic time to determine how natural selection and adaptation played major roles in the evolution of various species. Students will also investigate how physical characteristics evolved from exposure to various environmental conditions, such as habitat, food sources and climate. They will also see how changes in those ecosystems affected the traits passed down to future species' generations.

30 MINUTES - GALLERY TIME

Learn about survival and extinction of various species throughout time. Examine fossil records for development of physical characteristics and compare biological traits through geologic time. Discuss effects of food webs, various climates and biomes along with the shifting lands on a species evolution.

30 MINUTES - LAB

- Define evolution and discuss fossil evidence.
- Explain and discuss animal adaptation and provide examples across various species.
- Create a Creature activity.

30 MINUTES

Fossil Dig and Careers in Paleontology information

30 MINUTES

Store, Foucault Pendulum & Apatosaurus

TAKE HOME ITEMS

Three genuine Fossils from the Fossil Dig

GEORGIA PERFORMANCE STANDARDS

S7CS3d, S7CS3f, S7CS4a; S7CS5a-b, S7CS9a-g, S7CS10c; S7L1a; S7L3c; S7L4c, S7L4e, S7L5a-c, SCSH1a-c, SCSH3a-f, SCSH3e-f, SCSH6c-d, SCSH7a-e, SCSH9c, SB2d, SB4a, SB4c, SB4f, SB5c, SB5d, SEV1c, SEV1e, SEV2a, SEV2c, SEV3a-e, SZ2a-c, SZ3a, SZ3c, SZ4a-c.

FOSSILIFEROUS

GRADE LEVELS 2nd, 3rd, 4th, 5th, 6th & 7th

DESCRIPTION

What is a fossil? How is it made? These questions are answered in our Fossil Gallery walk through. Students learn how a fossil forms and discuss factors that affect the survival or extinction of organisms. Manipulatives will include make it/ take it fossil rubbings, a mold, and three real fossils to keep! Program will run for two hours.

30 MINUTES - GALLERY TIME

Define a fossil
Learn how fossils form and are dated
Learn about the different types of fossils

30 MINUTES - LAB

- Explain what a fossil is and how fossils form
- Students will make fossil mold and discuss molds and casts
- Fossil rubbings

30 MINUTES

Fossil Dig and Careers in Paleontology information

30 MINUTES

Store, Foucault Pendulum & Apatosaurus

TAKE HOME ITEMS

Three genuine Fossils from the Fossil Dig, Mold of real fossil

GEORGIA PERFORMANCE STANDARDS

S2CS1a, S2CS2d, S2CS4b-c, S2CS5b, S2CS6b, S2CS6d, S2CS7a, S2E2a-b, S3CS7b, S3CS8d, S3E1d, S4CS1b-c, S4CS4a, S4CS7a-b, S4CS8a-d, S4L1c-d, S4L2b, S5CS7a-b, S5P1a, S5CS8a-d, S6CS1a-b, S6CS3a-d, S6CS4c, S6E1f, S6E3c, S6E5a-f, S6E6, S7CS1a-b, S7CS5a-b, S7CS7a-d, S7CS8c, S7CS9a-g, S7L4c, S7L5a-c

THE KEY TO FOSSILS

GRADE LEVELS 6th, 7th, 9th-12th, College

DESCRIPTION

After studying a huge variety of early life in the Fossil Gallery, students learn how to use a dichotomous key to classify and identify actual fossil specimens. They then get to experience a fossil dig keeping their three favorite specimens. Program will run for two hours.

30 MINUTES - GALLERY TIME

- Definition of a fossil
- Explain how fossils form and are dated
- Explain the different types of fossils

30 MINUTES - LAB

- Define classification
- Define a dichotomous key and how it is used
- Students will then utilize a dichotomous key to classify several actual fossils

30 MINUTES

Fossil Dig and Careers in Paleontology information

30 MINUTES

Store, Foucault Pendulum & Apatosaurus

TAKE HOME ITEMS

Three genuine Fossils from the Fossil Dig

GEORGIA PERFORMANCE STANDARDS

S6CS6c, S6E5g, S7L1a-b, SES6d, S7L5c, S7CS6c, S8CS6a-c, SCSh4a, SCSh7c, SCSh8a-f, SEC1a-d, SB3c, SB4c, SB4e, SB4f, SB5a-e, SAST6c-d, SZ2a, SZ2c, SZ3a-b, SZ4a-b, SG1c, SEV3c, SES4c- e, SES6d-e

GEOLOGIC TIME SCALE

GRADE LEVELS 6th, 7th, 9th-12th, College

DESCRIPTION

Students travel through geologic time in the Fossil Gallery beginning with the formation of planet earth then moving through the various eras of prehistoric life to the present, observing the evolutionary changes in species of fossilized life. The concept of the relatively short amount of time that living things have been present on planet earth are driven home as the students physically model the time line in the gallery and then play a unique geologic time game in the lab. Program will run for two hours.

30 MINUTES - GALLERY TIME

- Travel through geologic time
- Discuss geologic time periods and the creatures that lived during that time
- Major events that scientist believed occurred to cause mass extinctions
- Geologic time rope activity to emphasize the brief period of time of life

30 MINUTES - LAB

- Define and identify the various divisions on a geologic time scale, eon, era, etc. using original "Go Dig" cards.
- Game of "Geo-parady"

30 MINUTES

Fossil Dig and Careers in Paleontology information

30 MINUTES

Store, Foucault Pendulum & Apatosaurus

TAKE HOME ITEMS

Three genuine Fossils from the Fossil Dig

GEORGIA PERFORMANCE STANDARDS

S6E3a-c, S6E5e-g, S7CS6c, S7L5c, SCSh4a-b, SCSh7c, SCSh8a-f, SES1c-d, SES3d-e, SES4a-e, SES6d-e, SG1a-d, SZ2a, SZ2c, SZ3a-c, SAST6c-d, SB4c, SB4e, SB4f, SB5a-e, SEV3c, SEC1a-d