Section: Geology8

Context: At the beginning of the 20th century, important advancement in geological science was facilitated by the ability to obtain accurate absolute dates to geologic events using radioactive isotopes and other methods. This changed the understanding of geologic time. Previously, geologists could only use fossils and stratigraphic correlation to date sections of rock relative to one another. With isotopic dates it became possible to assign absolute ages to rock units, and these absolute dates could be applied to fossil sequences in which there was datable material, converting the old relative ages into new absolute ages. CANNOTANSWER

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STUDENT: When was the ability to use radioactive isotopes to date rock for-
      mations developed?
TEACHER: \hookrightarrow "" (At the beginning of the 20th century )
STUDENT: What type of correlation was used previously to help date rock
      formations?
TEACHER: → "" (stratigraphic correlation )
STUDENT: It is now possible to convert old relative ages into what type of
      ages using isotopic dating?
TEACHER: \hookrightarrow "" (absolute ages )
STUDENT: Previous to isotopic dating sections of rocks had to be dated using
      fossils and stratigraphic correlation relative to what?
TEACHER: \hookrightarrow "" (to one another)
STUDENT: When dating rocks, what is the absolute isotopic date applied to?
TEACHER: \hookrightarrow "" (fossil sequences)
STUDENT: How did the advancement of using fossils help geological science
      in the early 20th century?
TEACHER: → "" (CANNOTANSWER)
STUDENT: What did using fossils help change for scientists?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: When was the ability to use fossils to date isotope formations de-
      veloped?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: What has it now become possible to do when dating isotopes while
      using fossils?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: What can scientists apply relative rock sections to to find iso-
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: When did geologists stop using isotopes?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: When did geologists beginning comparing fossils to each other?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: What did stratigraphic correlation replace?
TEACHER: \hookrightarrow "" (CANNOTANSWER)
STUDENT: Absolute ages had to be converted into what?
TEACHER: → "" (CANNOTANSWER)
STUDENT: What are fossil sequences applied to?
TEACHER: → "" (CANNOTANSWER 2
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