CH 17 REVIEW

•Regular rules

•USE ANYTHING YOU WANT-Except your phone* •Top Group gets 5 points extra credit •Each team gets 2 points for a tie •EVERYONE MUST BE IN A GROUP

•NEW RULE-ANY GROUP THAT DOES NOT SCORE 50% (10/20) LOSES 5 ON THEIR QUIZ TOMORROW



Pressures On....cover your answers

QUESTION 1

_____is when an organism evolves and is followed by a corresponding change in another organism

ANSWER- Coevolution

QUESTION 2

■ When nuclei are unstable, they spontaneously break apart, or decay, in a process called _____

ANSWER- Radioactivity



To be an _____a species must have existed for a short time, but had a large geographic range

Answer- Index Fossil

• A ______ is the length of time required for half of the radioactive atoms in a sample to decay

Answer- Half-Life

Paleontologists use divisions of the ________
______to represent evolutionary time

Answer- Geologic Time Scale

- Eras are subdivided into _____, which range in length from tens of millions of years to less than 2 million years
 - Answer Periods

The ______ proposes that eukaryotic cells arose from living communities formed by prokaryotic organisms

Answer- Endosymbiotic Theory

- **True or False....** Four Half-lives will leave 25% of the initial radioisotope
- Answer- False....four half-lives will leave 6.25%



• We are currently living in the _____ Era

Answer- Cenozoic

The ______at the end of the Paleozoic affected both plants and animals on land and in the seas

Answer- Mass Extinction

Carbon-14 has a half-life of 5730 years. When an animal died, it had 84 grams of carbon-14 in its system, how much carbon-14 would remain in the animals bones after 22,920 years?

Answer- 5.25 or 5 & 1/4

______ tells us the sequence in which events occurred, not how long ago they occurred

Answer- Relative Dating



■ What era did Dinosaurs dominate?

Answer- Mesozoic Era



Each Eon is broken into _____

Answer- Eras

What percentage of a radioisotope is left after 5 halflives?

Answer- 3 & 1/8% or 3.125%

A radioactive element has a half-life of 20 days. How much of a 16mg sample would be undecayed after 80 days?

- Answer- 1mg
- O days 20 days 40 days 60 days 80 days
- 16mg 8 mg 4mg 2mg <u>1mg</u>

Oxygen was added to Earth's atmosphere by the process of _____

Answer- Photosynthesis

_____is when unrelated organisms come to resemble one another

Answer- Convergent Evolution

______is when a small population evolve into diverse forms that live in different ways

Answer- Adaptive Radiation

The large-scale evolutionary changes that take place over long periods of time are referred to as

Answer- Macroevolution