

1.

In terms of area, how large were the impact marks caused by the collision of Comet Shoemaker-Levy 9 on the surface of Jupiter?

	Student Response	Value	Correct Answer
A.	2 times the size of the Chicxulub impact		
B.	around the size of the Earth	<input checked="" type="checkbox"/>	
C.	around the size of Texas		
D.	around the size of B.C.		
<input checked="" type="checkbox"/> E.	5 times the size of the Chicxulub impact		0%

Score: 0/1

2.

Lots of carbon dioxide was released into the atmosphere after the impact at Chicxulub. Where did the gas come from?

	Student Response	Value	Correct Answer
A.	from burning dinosaurs		
B.	from the vaporization of limestone	<input checked="" type="checkbox"/>	
C.	from vaporization of evaporite deposits		
D.	from the vaporized extra-terrestrial object itself		
<input checked="" type="checkbox"/> E.	from combining gases in the atmosphere after the initial blast		0%

Score: 0/1

3.


Which of the following statements about mass extinctions is FALSE?

	Student Response	Value	Correct Answer
A.	Mass extinctions are those that collectively occur within 1 million years.		
B.	Mass extinctions are caused by a variety of factors.		
C.	During a mass extinction species from all environments, terrestrial and marine, are affected.		
D.	A mass extinction is an event that wipes out > 30% of		

species existing at any one time.

 E.



last 65 million years.

Mass extinctions have occurred more frequently in the
100% 

Score: 1/1

4.



Which of the following would be the MOST
EFFECTIVE way to cause a mass extinction today?

	Student Response	Value	Correct Answer
A.	Cut down deciduous trees (those that lose all of their leaves for part of the year).		
B.	Stop fertilizing farm fields.		
 C.	Acidify major inland lakes.	0%	
D.	Exterminate the majority of the biota at the base of the food chain.		
E.	Exterminate all top predators in North America.		

Score: 0/1

5.

Which of the following may be responsible for a
cyclical period of extinction every 26 to 30 million years?

	Student Response	Value	Correct Answer
A.	Van Allen belt		
 B.	Jovian gravity well	0%	
C.	Siberian Traps		
D.	Oort Cloud		
E.	Asteroid belt		

Score: 0/1

6.

What is the Principle of Faunal Succession?

Student Response	Value	Correct Answer
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- A. Fossils of organisms, preserved in rocks, succeed one another thru time in a predictable, identifiable way. ☒
- B. Species of plants and animals evolve then became extinct through Earth's history.
- ☒ C. Fossils found in the lowest unit in a sequence of sediments will be the oldest. 0%
- D. Characteristics of species that are extinct can be studied from their fossils.
- E. The study of the correlation and relative age of rock strata by using the fossils contained within them is called Biostratigraphy.

Score: 0/1

7.

All of the following have been used as supporting evidence for an impact event in the late Cretaceous EXCEPT _____.

	Student Response	Value	Correct Answer
<input checked="" type="checkbox"/> A.	evidence of glaciers in Gondwana	100%	<input checked="" type="checkbox"/>
B.	the presence of a large circular structure off the coast of Mexico		
C.	the presence of shocked quartz		
D.	the extinction of ammonites		
E.	the presence of elevated levels of iridium		

Score: 1/1

8.


Which extinction event was probably the "worst day" for the biosphere?

	Student Response	Value	Correct Answer
A.	Late Ordovician		
B.	Cretaceous/Tertiary		
<input checked="" type="checkbox"/> C.	Permo/Triassic	100%	<input checked="" type="checkbox"/>
D.	Late Devonian		
E.	End Triassic		

Score: 1/1

9.


How could oceans become anoxic (lack oxygen)? Due to _____.

Student Response	Value	Correct Answer
A. oxygen gas from marine water		intense heating from mid-ocean ridge driving off
B. was not cold enough to sink during warm climatic intervals	<input checked="" type="checkbox"/>	a slow down in ocean circulation when polar waters
 C. sea water		a chemical reaction between iridium and oxygen in 0%
D. minerals in clay		oxygen being included in the molecular structure of
E. in sediments during periods of intense cold		oxygen sinking to the ocean floor and being trapped

Score: 0/1

10.

Concerning the Permo-Triassic extinction, which of the following statements is FALSE?

Student Response	Value	Correct Answer
A. Over 95% of all species became extinct.		
B. The continents were grouped together in a land mass called Pangea.		
 C. 100%	<input checked="" type="checkbox"/>	The extinction was largely restricted to land based creatures.
D. Trilobites went into extinction.		
E. The Siberian Traps may have contributed to the mass extinction event.		

Score: 1/1

11.

What percent of marine species were lost during the Cretaceous-Tertiary extinction?

	Student Response	Value	Correct Answer
A.	only some, about 25%		
B.	about half, 50%		
C.	all of them, 100%		
D.	none, 0%		
<input checked="" type="checkbox"/> E.	almost all, 80%	100%	<input checked="" type="checkbox"/>

Score: 1/1

12.

Fossil fern spores can be used as a proxy for which of the following?

	Student Response	Value	Correct Answer
A.	glacial events		
B.	ocean anoxia		
<input checked="" type="checkbox"/> C.	forest fires	100%	<input checked="" type="checkbox"/>
D.	tsunami		
E.	earthquakes		

Score: 1/1

13.



Which of the following likely contributed to the significant increase in greenhouse gases in the atmosphere in the Late Cretaceous?

	Student Response	Value	Correct Answer
A.	emission of volcanic gases		<input checked="" type="checkbox"/>
B.	formation of limestone CaCO_3 in the oceans		
C.	vaporization of basalt rock		
<input checked="" type="checkbox"/> D.	chemical reactions which destroyed the ozone layer	0%	
E.	global-scale fires		

Score: 0/1

14.



How did Ussher determine the age of the Earth?

Student Response	Value	Correct Answer
A. He based it on the life span of all the creatures thought to have existed since the Cambrian.		
B. He based it on a careful examination of the biostratigraphy of dinosaurs and other Mesozoic creatures.		
C. He used information from the thickness of ocean sediments and the rates these are being deposited today.		
D. He based it on the difference between age of craters on Mercury and Mars and those found on the Earth and the Moon.		
 E. He used information from the Bible.	100%	

Score: 1/1

15.



Approximately how many objects enter the Earth's atmosphere over 24 hours?

Student Response	Value	Correct Answer
A. 5		
B. 10		
C. 100		
D. 1000		
 E. 100,000 million	100%	

Score: 1/1

16.

Which of the following statements is FALSE?

Student Response	Value	Correct Answer
A. NASA's Spaceguard is Earth's defense against impacts from Near Earth Objects.		
 B. We expect the frequency of Torino Scale level 2-4 to be more frequent than level 8-10.	0%	
C. An asteroid that's a "civilization killer" is SMALLER than one that causes a mass extinction.		
D. The potential risk of being killed by an impact event is greatly affected by the size of an asteroid, the size of the area affected, and the recurrence interval.		
E. The Manicouagan crater is one of many craters that		

resulted from a fragmented comet impacting Earth.

Score: 0/1

17.

How rapid was the Permo-Triassic extinction thought to be?

	Student Response	Value	Correct Answer
A.	around 3 million years		
B.	between 1.5 – 2.5 million years		
<input checked="" type="checkbox"/> C.	less than 1 million years	100%	<input checked="" type="checkbox"/>
D.	between 5 – 10 million years		
E.	around 2 million years		

Score: 1/1

18.

Why does the Earth NOT have an impact-scarred surface like the Moon?



	Student Response	Value	Correct Answer
A.	The Moon's atmosphere attracts the majority of large space debris.		
B.	Earth's surface has undergone change and continental reconfiguration.	<input checked="" type="checkbox"/>	
C.	The Earth is slightly older than the Moon.		
D.	The Earth has experienced less impacts than the Moon.		
<input checked="" type="checkbox"/> E.	The Earth is larger and has a stronger gravitational field.	0%	

Score: 0/1

19.

Pangaea is a supercontinent that _____.



	Student Response	Value	Correct Answer
A.	existed during the Ordovician		
B.	existed during the Precambrian		

- C. fragmented throughout the Mesozoic 
-  D. formed during the Jurassic 0%
- E. had undergone complete fragmentation by the late Permian

Score: 0/1

20.

At the end of which period did the Earth loose over 95% of its species?

		Student Response	Value	Correct Answer
A.	Permian			
B.	Silurian			
C.	Mesozoic			
D.	Triassic			
 E.	Cretaceous			