*Biology for a Changing World 2e,* Chapter 17 Test Bank

1. An isotope is the same element with a different number of

1. protons.
2. neutrons.
3. electrons.
4. electrons and protons.
5. protons and neutrons.

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:isotopes and radioactive decay

2. Uranium-238 after many decay events becomes this stable element.

1. radon-222
2. uranium-234
3. thorium-234
4. lead-206
5. polonium-210

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:isotopes and radioactive decay

3. To determine the age of rocks, the decay of which radioactive element(s) can be used?

1. carbon-14
2. uranium-238, rubidium-87, and/or potassium-40
3. phosphorus-40, uranium-234, and/or rubidium-87
4. carbon-14 and uranium-238
5. uranium-240

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:isotopes and radioactive decay

4. To determine the age of organic remains, the decay of which radioactive element(s) are measured?

1. carbon-14
2. uranium-238
3. uranium-238 and carbon-14
4. carbon-12
5. uranium-240

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:isotopes and radioactive decay

5. Radiometric decay of carbon-14 would be used in dating

1. sedimentary rock.
2. a trace fossil.
3. an insect in amber.
4. a fossil imprint.
5. All of the above.

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:isotopes and radioactive decay

7. How old is Earth?

* 1. 1–2 million years old
  2. 3–4 million years old
  3. 1–2 billion years old
  4. 4–5 billion years old
  5. 1–2 trillion years old

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:radioactive dating

8. Why do scientists look at rocks from other planets to estimate the age of Earth? Why not use rocks from Earth itself?

*Answer:* Scientists use rocks from other planets to age Earth because Earth is continuously changing and recycling its rocky crust making an accurate estimate of age nearly impossible. In contrast, many other planets are stable, and their rocks are unchanged since all the planets were formed. Because all the planets were formed at the same time, aging another planet should yield an accurate estimate for the age of Earth as well.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: radioactive dating

9. The idea that the entire solar system and all the planets in it were formed at the same time is called

* 1. the black hole hypothesis.
  2. the derivation hypothesis.
  3. the extraterrestrial hypothesis.
  4. the nebular hypothesis.
  5. the solar hypothesis.

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:radioactive dating

10. All of the following are TRUE of radioactive isotopes, EXCEPT

* 1. they are unstable.
  2. they transform into other elements.
  3. they release high-energy electrons.
  4. they are used in radioactive dating.
  5. the amount of time for a radioactive isotope to decay to half its original quantity is called its half-life.

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:radioactive dating

11. Which of the following radioactive isotopes is used to date organic remains?

* 1. carbon-14
  2. potassium-40
  3. rubidium-87
  4. uranium-238
  5. lead-206

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:radioactive dating

12. The half-life of potassium-40 is 1.3 billion years. If a rock starts with 12,000 atoms of potassium-40, how many atoms will remain in 650 million years?

* 1. 1,000
  2. 3,000
  3. 4,000
  4. 6,000
  5. 9,000

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: radioactive dating

13. A radioactive isotope is

* + 1. a pair of identical molecules.
    2. two molecules with the same tonicity.
    3. an element with an unstable nucleus that decays to a more stable form.
    4. an element that generates electrons.

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:half-life

14. Half-life is an estimate of

1. half of the age of a rock’s life.
2. the age of a rock’s life that is at least 50% likely to be correct.
3. the former size of a rock.
4. the time it takes for half of a rock’s isotope atoms to decay.
5. the weight of the isotope in a rock.

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:half-life

15. Uranium-238 has a half-life of 4.5 billion years. You have a rock that formed with 100,000 uranium-238 molecules. How many uranium-238 molecules will be left in 4.5 billion years?

1. 100,000
2. 75,000
3. 50,000
4. 25,000
5. 0

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:half-life

16. Carbon-14 decays and becomes

1. carbon-16.
2. nitrogen-14.
3. carbon-11.
4. boron-12.
5. oxygen-15.

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:radioactive decay

17. The half-life of carbon-14 is \_\_\_\_\_ years.

1. 12
2. 57,000
3. 5730
4. 1 billion
5. 4.5 billion

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:radioactive decay

18. Uranium-238 decays into thorium-234 and finally into

1. thorium-232.
2. lead-232.
3. radon-222.
4. radon-224.
5. lead-206.

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:radioactive decay

19. Define the term *half-life*.

*Answer:* The time it takes for half of the isotope in a sample to decay.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:half-life

20. Which CANNOT be accurately dated using radiometric techniques?

1. peat
2. wood
3. charcoal
4. sedimentary rocks
5. igneous rocks

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important words/concepts: radiometric dating

21. Which element has the shortest half-life?

1. rubidium-87
2. lead-214
3. uranium-238
4. carbon-14
5. potassium-40

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important words/concepts: radiometric dating

22. Which ratio is NOT analyzed for radiometric analysis?

1. rubidium-strontium
2. uranium-lead
3. potassium-argon
4. carbon-nitrogen
5. uranium-nitrogen

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important words/concepts: radiometric dating

23. Which element has the longest half-life?

1. rubidium-87
2. lead-214
3. uranium-238
4. carbon-14
5. potassium-40

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important words/concepts: radiometric dating

24. Where would the most lead be found in a radiometric analysis of a 5-foot, millions of years old deposit of volcanic ash?

1. at the top
2. at the bottom
3. in the middle
4. in the mid-center
5. in the mid-bottom

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important words/concepts: radiometric dating

25. The half-life of an isotope is 5,000 years. With a starting material of 1g of an isotope, after 5,000 years, how much would remain?

1. 2 g
2. 0.5 g
3. 1 g
4. 2.5 g
5. 0.25 g

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important words/concepts:radiometric dating

26. If a radiometric analysis of an isotope and its stable element yielded 50% of each, how many half-lives would have occurred?

1. 5
2. 4
3. 3
4. 2
5. 1

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important words/concepts:radiometric dating

27. If a radiometric analysis of an isotope and its stable element yielded 25% of the isotope and 75% of its stable element, how many half-lives would have occurred?

1. 5
2. 4
3. 3
4. 2
5. 1

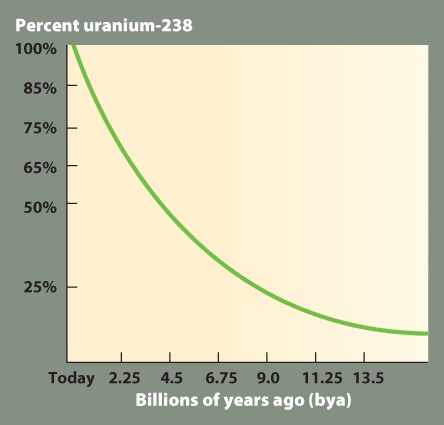
Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important words/concepts: radiometric dating



28. Based on the information in the graph, approximately how old are two rocks, one containing 25% uranium-238 and 75% lead, and one containing 50% uranium-238 and 50% lead?

1. around 2.25 billion years and 4.5 billion years, respectively
2. around 9 billion years and 4.5 billion years, respectively
3. around 1.3 billion years and 2.4 billion years, respectively
4. around 4.5 billion years and 9 billion years, respectively
5. The question cannot be answered with the information provided.

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:radioactive dating

29. The half-life of uranium-238 is 4.5 billion years. Uranium-238 decays to lead-206. You find a rock with 18,000 atoms of uranium-238 and 6,000 atoms of lead-206. How old is the rock?

* 1. 1.12 billion years old
  2. 2.25 billion years old
  3. 4.45 billion years old
  4. 6.75 billion years old
  5. 8.90 billion years old

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts:radioactive dating

30. Where are MOST fossils found?

* 1. igneous rock
  2. sedimentary rock
  3. amber
  4. in frozen ice packs
  5. in deserts

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:fossils, sedimentary rock

31. Can radiometric dating be performed on igneous or sedimentary rock? Why can’t the other type of rock be dated using radiometric methods?

*Answer:* Radiometric dating can only be performed on igneous rock because when the rocks form, they contain a certain number of radioactive isotopes that have not yet decayed. Sedimentary rocks cannot be dated using radiometric methods because sedimentary rocks are made up of particles from many different rocks of various ages.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:igneous rock, radiometric dating, sedimentary rock

32. If fossils are most often found in sedimentary rock but sedimentary rock cannot be aged using radiometric methods, then how can a scientist know how old a fossil is?

*Answer:* Scientists can still know how old a fossil is by radiometrically dating the igneous rocks above and below the fossil and estimating the age of the fossil between them.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: fossils, radiometric dating, sedimentary rock

33. Which of these is most likely to be used to directly date the age of a fossil?

1. carbon-12
2. uranium-238
3. lead-206
4. carbon-14
5. thorium-234

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:radioactive decay

34. If a rock contains 75% lead-206, you would estimate it to be about \_\_\_\_ billion years old.

1. 13.5
2. 9
3. 1
4. 6.75
5. 11.25

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts**:** radioactive decay

35. If a rock contains 70% uranium-238, you would estimate it to be about \_\_\_\_ billion years old.

1. 13.5
2. 9
3. 1
4. 6.75
5. 2.25

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:radioactive decay

36. What percentage of lead-206 would a 9-billion-year-old rock have?

*Answer:* about 75%

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:radioactive decay

37. If you don’t know how many radioactive isotope atoms were present at the time a rock was formed, how can you tell how many have decayed since that time?

*Answer:* You can accomplish this by comparing the percentage of the radioactive isotope atoms now present to the percentage of atoms of the end product of the decay. For example, uranium-238 decays into lead-206. The decay is at a constant rate, so by comparing percentages to a graph of the decay rate, we can estimate an age of the rock.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts: radioactive decay

38. How likely would it be to find a rock with 90% lead-206? Explain.

*Answer:* It would not be at all likely. A rock with that much lead-206 would be well over 11 billion years old, which is much older than any estimate of the age of the solar system.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts:radioactive decay

39. Why would it be unlikely to find a rock with 90% lead-206?

*Answer:* A rock with that much lead-206 would be well over 11 billion years old, which is much older than any estimate of the age of the solar system.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts:radioactive decay

40. Earth is estimated to be around

1. 6,000–8,000 years old.
2. 4,000–6,000 years old.
3. 4,600,000 years old.
4. 4,600,000,000 years old.
5. 4,600,000,000,000 years old.

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history

41. This gas began to accumulate between 3 and 2.5 billion years ago.

1. hydrogen
2. oxygen
3. methane
4. ammonia
5. carbon dioxide

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: evolutionary history

42. The first fossil remains are from this geologic time.

1. Pre-Cambrian
2. Cambrian
3. Paleozoic
4. Cenozoic
5. Mesozoic

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history

43. Miller and Urey demonstrated the formation of organic molecules from simulating a primitive Earth atmosphere containing water vapor and the gases

1. carbon dioxide, hydrogen, methane, and ammonia.
2. carbon dioxide, methane, and ammonia.
3. hydrogen, methane, and ammonia.
4. oxygen, hydrogen, methane, and ammonia.
5. oxygen, methane, and ammonia.

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts: evolutionary history

44. Which period contains the present day?

1. Tertiary
2. Quaternary
3. Cambrian
4. Carboniferous
5. Cenozoic

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:evolutionary history

45. Based on the information in the partial geological timeline, which of the following sequences correctly identifies the order in which organisms arose on Earth?

1. vertebrate ancestors, seedless plants on land, amphibians, reptiles
2. vertebrates, insects, seedless plants, reptiles
3. vertebrate ancestors, insects, fungi, reptiles
4. fungi, primitive insects, reptiles, amphibians
5. None of the above.

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Medium

Important Words/Concepts: evolutionary history

46. How old are the oldest known fossils?

* 1. 30–40 million years old
  2. 400–500 million years old
  3. 800–900 million years old
  4. 1–2 billion years old
  5. 3–4 billion years old

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: evolutionary history, fossils

47. All of the following are TRUE of earth’s early atmosphere, EXCEPT

* 1. ammonia was abundant.
  2. hydrogen was abundant.
  3. methane was abundant.
  4. oxygen was nearly absent.
  5. the very first organisms that could survive the early atmosphere were photosynthetic organisms.

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:evolutionary history

48. How did the emergence of photosynthetic organisms alter Earth’s early atmosphere? How did this change influence the evolution of life on Earth?

*Answer:* Photosynthetic organisms produced oxygen as a waste product; thus, oxygen became abundant in Earth’s atmosphere. As a result, eukaryotic organisms evolved.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts: eukaryotic, evolutionary history

49. The first diverse animal world appeared during the

* 1. Cambrian explosion.
  2. Ordovician explosion.
  3. Silurian explosion.
  4. Devonian explosion.
  5. Carboniferous explosion.

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: Cambrian explosion, evolutionary history

50. The first organisms on land were

* 1. plants.
  2. insects.
  3. fish.
  4. amphibians.
  5. reptiles.

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:Cambrian explosion, evolutionary history

51. Put the following in order of their evolution.

* 1. invertebrates→algae→amphibians→birds→reptiles→mammals
  2. invertebrates→algae→vertebrates→reptiles→amphibians→mammals
  3. algae→invertebrates→vertebrates→reptiles→amphibians→mammals
  4. algae→vertebrates→ amphibians→reptiles→mammals→invertebrates
  5. algae→invertebrates→vertebrates→amphibians→reptiles→mammals

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history

52. How long ago did dinosaurs go extinct?

* 1. 65,000 years ago
  2. 650,000 years ago
  3. 6.5 million years ago
  4. 65 million years ago
  5. 650 million years ago

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history

53. What is *punctuated equilibrium*?

*Answer:* Punctuated equilibrium is the theory that most species evolve in periodic bursts due to sudden environmental change.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history, punctuated equilibrium

54. All of the following statements about the evolution of life on Earth are TRUE, EXCEPT

* 1. evolution has involved several mass extinctions followed by periods of diversification.
  2. the first diversification of animal life occurred during the Cenozoic era.
  3. when life colonizes new habitats, it rapidly diversifies into new species.
  4. the dinosaurs most likely went extinct when a huge asteroid crashed into Earth.
  5. oxygen only became abundant in the atmosphere as a result of the evolution of photosynthetic organisms.

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts: adaptive radiation, evolutionary history, punctuated equilibrium

55. Humans are currently living in which era?

* 1. Cenozoic
  2. Mesozoic
  3. Paleozoic
  4. Cambrian
  5. Pre-Cambrian

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary history

57. Life first began during the \_\_\_\_\_ period.

1. Cambrian
2. Archean
3. Jurassic
4. Proterozoic
5. Tertiary

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:history of the planet

58. During which of the following eras was the planet the warmest?

1. Cambrian
2. Tertiary
3. Jurassic
4. Triassic
5. Archean

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:history of the planet

59. During which of the following eras did the atmosphere have the least oxygen?

1. Cambrian
2. Archean
3. Jurassic
4. Cretaceous
5. Tertiary

Answer: B

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts: history of the planet

60. Forests of large seedless plants dominated the planet during the \_\_\_\_\_ period.

1. Cambrian
2. Jurassic
3. Cretaceous
4. Carboniferous
5. Tertiary

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:history of the planet

61. When life first began,

1. the planet had a lot of oxygen in the atmosphere and was much warmer.
2. the planet had a lot of oxygen in the atmosphere and was much cooler.
3. the planet had a lot of methane in the atmosphere and was much warmer.
4. the planet had a lot of methane in the atmosphere and was much cooler.
5. the planet had very little oxygen in the atmosphere and was much cooler.

Answer: C

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Easy

Important Words/Concepts:history of the planet

62. What percentage of life on the planet died off during the Permian extinction?

1. 10%
2. 80%
3. 75%
4. 95%
5. 99%

Answer: D

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:history of the planet

61. Animal life greatly diversified during the \_\_\_\_\_ period.

1. Cambrian
2. Triassic
3. Jurassic
4. Proterozoic
5. Tertiary

Answer: A

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts: history of the planet

62. Large plant-eating dinosaurs were common during the \_\_\_\_\_ period.

1. Cambrian
2. Tertiary
3. Cretaceous
4. Carboniferous
5. Jurassic

Answer: E

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Know It

Difficulty: Hard

Important Words/Concepts:history of the planet

63. Compare today’s temperatures with the temperature of the planet when life first began.

*Answer:* The planet was much hotter when life first began.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:history of the planet

64. What is a mass extinction?

*Answer:* A mass extinction is when a large percentage of life forms disappear from the planet.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:history of the planet

65. Compare the atmosphere today to the atmosphere when life first began.

*Answer:* The atmosphere had very little oxygen; instead, it had a lot of ammonia, methane, and hydrogen.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Easy

Important Words/Concepts:history of the planet

66. How could an asteroid striking Earth lead to the death of 60% of the species on the planet?

*Answer:* When the asteroid that made the Chicxulub crater struck Earth, the atmosphere was filled with debris, blocking out much of the Sun for months. The blocked sunlight led to lower temperatures, which killed off many organisms that could not adapt to the changes.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts: history of the planet

67. What are the causes of mass extinction?

*Answer:* Mass extinction occurs when the planet changes rapidly. Many things can cause that change—periods of volcanism, asteroids hitting the planet, etc. When the planet changes that quickly, organisms don’t have time to adapt and therefore they go extinct.

DQ: What do we know about the history of life on Earth, and how do we know it?

Type: Use It

Difficulty: Hard

Important Words/Concepts: history of the planet

68. Bison and wildebeest are both large grazing animals with similar adaptations to life on relatively arid grasslands. Bison are found only in North America; wildebeest are found only in Africa. Which of the following explains why they share similar adaptations but live on different continents?

1. Their common adaptations are due to the similarities in their environments, but they evolved on separate continents and have always been isolated from one another.
2. Their common adaptations are due to the fact that they both evolved in Africa and later spread to North America. Bison outcompeted wildebeest in North America, though, and wildebeest outcompeted bison in Africa, leaving them separated from one another.
3. Their common adaptations are due to the fact that they are closely related evolutionarily. They live in different areas because wildebeest are extinct in North America.
4. Each species evolved on a separate continent, where the arid grasslands in which they lived forced each species to evolve the same adaptations.
5. None of the above.

Answer: A

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Medium

Important Words/Concepts: biogeography, evolutionary history, plate tectonics

69. Marsupials are mammals that give birth to premature young and carry them in pouches; examples include kangaroos, wallabies, and opossums. Most marsupials live in Australia, but one species, the Virginia opossum, occurs in North and South America. How do you think a marsupial came to be in North and South America when all others are on the opposite side of Earth?

*Answer:*The Virginia opossum came to be in South America because millions of years ago all the continents were connected. Most marsupials evolved in what is now Australia, but one species, which was living in what is now South America, managed to survive to modern times and became the Virginia opossum.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts:biogeography, evolutionary history, plate tectonics

70. You discover a fossil in an ancient streambed in the southeastern United States of what appears to be an early member of the *Camelidae* family, which includes camels and llamas. However, the closest living members of this family are the llamas of South America. Should you be concerned that you have misidentified the bone? Why or why not?

*Answer:* No, you do not need to be concerned that you misidentified the bone. Even though the bone was found in an area not currently inhabited by descendents of that species, it does not mean that the ancient species did not occur there at one time.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts:biogeography, evolutionary history, plate tectonics

71. Which of the following BEST describes the current distribution of life on Earth?

1. The distribution of species is determined by the current habitat and climate.
2. The distribution of species is determined by the habitat and climate that prevailed millions of years ago.
3. The distribution of species is determined by where species occurred when Earth’s landmasses moved and separated from each other.
4. The distribution of species is determined by ancient and modern barriers to dispersal.
5. All of the above.

Answer: E

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts: biogeography, evolutionary history, plate tectonics

72. Why does adaptive radiation occur after a mass extinction?

*Answer****:***All of the niches and habitats of the extinct animals are available for colonization.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts: adaptive radiation

73. The movement of Earth’s crust is termed

1. volcanism.
2. pangaea.
3. plate tectonics.
4. biogeography.
5. the continental divide.

Answer: C

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts:plate tectonics of Earth

74. Write T for true and F for false after each statement.

1. Penguins may be found close to the equator.
2. Penguins may be found in the Arctic.
3. Polar bears inhabit Antarctica.
4. Polar bears and penguins may once have lived on the same continent.
5. The continents are still moving.

*Answer:* Penguins may be found close to the equator. (T)

Penguins may be found in the Arctic. (F)

Polar bears inhabit Antarctica. (F)

Polar bears and penguins may once have lived on the same continent. (T)

The continents are still moving. (T)

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts: plate tectonics of Earth

75. Approximately 245 million years ago, near the end of Paleozoic, Earth’s plates were joined in a land mass called

1. Rhodinia.
2. Pangaea.
3. Laurasia.
4. Gondwana.
5. Pannotia.

Answer: B

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts: plate tectonics of Earth

76. The field of biogeography provides information about

1. the geographic location of a species.
2. the distribution or range of a species.
3. the adaptations of a species over time.
4. the evolutionary history of a species.
5. All of the above.

Answer: E

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Hard

Important Words/Concepts:biogeography and plate tectonics

77. Plate tectonics influences

1. local climate.
2. distribution of organisms.
3. evolution of species on land.
4. evolution of species near land.
5. All of the above.

Answer: E

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Hard

Important Words/Concepts:biogeography and plate tectonics

78. Millions of years ago, all the continents were one big landmass called \_\_\_\_\_\_\_\_. Eventually, however, the continents separated by a geologic process called \_\_\_\_\_\_\_\_.

1. Pangaea; plate tectonics
2. Gaia; plate tectonics
3. Pangaea; continental tectonics
4. Gaia; continental tectonics
5. Pangaea; geotectonics

Answer: A

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts: biogeography, evolutionary history, Pangaea, plate tectonics

79. Although dinosaurs were restricted to warm climates, many dinosaur fossils have been found in Antarctica. How do you explain this?

*Answer:* Antarctica was not always cold, and millions of years ago it likely had a warm climate hospitable to dinosaurs. Because of plate tectonics, however, Antarctica eventually moved to the southern hemisphere, where the climate became much colder.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts:biogeography, evolutionary history, Pangaea, plate tectonics

80. The geologic process that divided the continents is called

1. continental divide.
2. plate tectonics.
3. desertification.
4. continental realignment.
5. continental shift.

Answer: B

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts: plate tectonics

81. The continents we recognize today used to be one supercontinent called

1. Oceania.
2. Australasia.
3. Zoolandia.
4. Pangaea.
5. Caladonia.

Answer: D

DQ: What factors help to explain the distribution of species on Earth?

Type: Know It

Difficulty: Easy

Important Words/Concepts:Pangaea, plate tectonics

82. India was an island \_\_\_\_\_ million years ago.

1. 500
2. 1
3. 65
4. 135
5. 245

Answer: C

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts: geographic changes

83. Why are there no polar bears in the Antarctic?

*Answer:* Polar bears evolved after the Arctic and Antarctic split apart.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts:geographic changes

84. Why are there no penguins in the Arctic?

*Answer:* Penguins evolved after the Arctic and Antarctic split apart.

DQ: What factors help to explain the distribution of species on Earth?

Type: Use It

Difficulty: Easy

Important Words/Concepts:geographic changes

85. Of the groups below, which has the greatest number of classified species?

1. invertebrate animals
2. plants
3. fungi
4. vertebrate animals
5. protists

Answer: A

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:classification of organisms

86. Of the taxonomic categories below, which has the greatest number of organisms or most inclusive category?

1. kingdom
2. domain
3. phylum
4. class
5. order.

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: classification of organisms

87. Of the taxonomic categories below, which has the least number of organisms or least inclusive category?

1. kingdom
2. order
3. domain
4. phylum
5. class

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: classification of organisms

88. Which one of the habitats below would have the most species diversity?

1. tundra
2. deciduous forest
3. peat bog
4. tropical rain forest
5. desert

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:classification of organisms

89. Although this group has the least number of identified and classified species, its diversity is really unknown.

1. invertebrate animals
2. plants
3. prokaryotes
4. fungi
5. vertebrate animals

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:classification of organisms

90. About 25,000 species of fish have currently been named and identified. This means that fish make up about what percentage of vertebrate species?

1. 10%
2. 25%
3. 40%
4. 50%
5. 75%

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts: classification of organisms

91. For every vertebrate animal species, approximately how many named invertebrate animal species live on Earth?

1. 2
2. 20
3. 4
4. 40
5. 5

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:classification of organisms

92. You are a scientist who notices great similarity between the spines of a hedgehog and the spines of a porcupine. When you study their genetics, however, you notice that the set of genes that code for hedgehog spines is a different set of genes than the set that codes for porcupine spines. You decide this must be an example of

1. convergent evolution.
2. divergent evolution.
3. coalescent evolution.
4. unifying evolution.
5. symbiotic evolution.

Answer: A

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:convergent evolution

93. Which of the following groups contains the highest number of classified species?

1. fungi
2. plants
3. protists
4. invertebrates
5. vertebrates

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:diversity, taxonomy

94. Why do scientists have a difficult time estimating the total number of species on Earth?

*Answer:* Scientists have a difficult time estimating the total number of species on Earth because there are so many, and because many of them have not been described yet. Furthermore, because prokaryotic organisms can live just about anywhere, the true number of prokaryotes will likely never be known.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts: diversity, taxonomy

95. The total number of classified species known to science is roughly

* 1. 500,000.
  2. 1 million.
  3. 2 million.
  4. 5 million.
  5. 10 million.

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts:diversity, taxonomy

96. Which of the following places the classification levels of species in the correct order from broadest category to most specific?

* 1. kingdom→class→order→phylum→genus→family→species
  2. kingdom→phylum→class→order→family→genus→species
  3. kingdom→phylum→order→family→class→species→genus
  4. phylum→kingdom→order→class→family→genus→species
  5. phylum→family→class→kingdom→order→genus→species

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Medium

Important Words/Concepts:diversity, taxonomy

97. There are more \_\_\_\_\_ than any other single group of organisms.

* + 1. plants
    2. fungi
    3. vertebrate animals
    4. invertebrate animals
    5. bacteria and archae

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: classification

98. About \_\_\_\_\_ million organisms on the planet have been formally named.

1. 100
2. 5
3. 30
4. 1.8
5. 4.6

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:classification

99. Compare the number of vertebrate animals with the number of invertebrate animals.

*Answer:* There are many times more invertebrates than vertebrates.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:classification

99. Compare the number of vertebrate animals with the number of invertebrate animals. How does this compare to their first appearance on the planet?

*Answer:* There are many times more invertebrates than vertebrates. Invertebrates have been around much longer on the planet, giving them much more time to radiate evolutionarily.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Hard

Important Words/Concepts:classification

100. Which list is organized from most to least inclusive?

1. order, phylum, family, genus, species
2. species, genus, order, kingdom, domain
3. phylum, class, order, species, kingdom
4. kingdom, phylum, class, order, genus
5. domain, phylum, kingdom, class, species

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:the hierarchy of classification

101. Place in order from least to most inclusive.

1. species
2. class
3. kingdom
4. genus
5. family
6. phylum
7. domain
8. order

*Answer:* A, D, E, H, B, F, C, G

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:the hierarchy of classification

102. Place in order from least to most inclusive.

1. Hominidae
2. Chordata
3. Eukarya
4. *Homo sapiens*
5. Mammalia
6. Primate
7. Animalia
8. Homo

*Answer:* D, H, A, F, E, B, G, C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts: the hierarchy of classification

103. Match up the terms:

1. Hominidae \_\_ genus
2. Chordata \_\_ kingdom
3. Eukarya \_\_ class
4. *Sapiens* \_\_ order
5. Mammalia \_\_ domain
6. Primate \_\_ species
7. Animalia \_\_ phylum
8. *Homo* \_\_ family

*answer:*

1. Hominidae \_\_ genus (H)
2. Chordata \_\_ kingdom (G)
3. Eukarya \_\_ class (E)
4. *Sapiens* \_\_ order (F)
5. Mammalia \_\_ domain (C)
6. Primate \_\_ species (D)
7. Animalia \_\_ phylum (B)
8. *Homo* \_\_ family (A)

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts:the hierarchy of classification

*Use the following table for Questions 104 through 106.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Pallid bat | Great white shark | Manta ray |
| Kingdom | Animals | Animals | Animals |
| Phylum | Chordata | Chordata | Chordata |
| Class | Mammalia (mammals) | Chondrichthyes (cartilaginous fishes) | Chondrichthyes (cartilaginous fishes) |
| Order | Chiroptera | Lamniformes | Myliobatiformes |
| Family | Vespertilionidae | Lamnidae | Mylobatidae |
| Genus | *Antrozous* | *Carcharodon* | *Manta* |
| Species | *A. pallidus* | *C. carcharias* | *M. birostris* |

104. The scientific name for every organism consists of the names of the

1. order and family.
2. family and genus.
3. genus and species.
4. class and order.
5. family and species.

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:taxonomy

105. You are a scientist classifying a new species of bird. You realize, however, that you made a mistake when classifying the bird. Which of the following categories is the most likely to be WRONG?

1. phylum
2. class
3. order
4. family
5. genus

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:taxonomy

106. Which of the following is the largest level of classification?

1. order
2. genus
3. family
4. phylum
5. kingdom

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: classification

107. All organisms that produce milk and are covered in fur are

1. carnivores.
2. primates.
3. invertebrates.
4. members of the genus *Homo*.
5. mammals.

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:classification

108. Which of the following is the smallest level of classification?

1. order
2. genus
3. family
4. phylum
5. species

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:classification

109. Members of a(n) \_\_\_\_\_\_\_ are MORE closely related to each other than members of a genus.

1. order
2. kingdom
3. family
4. phylum
5. species

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts:classification

110. Members of a(n) \_\_\_\_\_\_\_ are LESS closely related to each other than members of a class.

1. order
2. genus
3. family
4. phylum
5. species

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts:classification

111. Put these in order, starting with the smallest group: species, family, kingdom, phylum, order, genus, class.

***Answer:***species, genus, family, order, class, phylum, kingdom

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts: classification

112. Phylogeny is the study of

1. evolutionary history among groups of organisms.
2. the distribution of living organism on Earth.
3. classification of living organisms.
4. the species richness of an ecosystem.
5. convergent evolution.

Answer: A

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary trees

113. The five kingdoms have been reassigned into three domains based on

1. shared traits.
2. DNA homology.
3. comparative anatomy.
4. embryology.
5. animals or monera.

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: evolutionary trees

114. The domain Eukarya includes

1. archaea, fungi, plants, and animals.
2. bacteria, fungi, plants, and animals.
3. monera, fungi, plants, and animals.
4. plants, fungi, animals, and protists.
5. protists, monera, plants, fungi, and animals,

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary trees

115. Humans belong is which domain?

1. Prokarya
2. Hominidae
3. Archaea
4. Animalia
5. Eukarya

Answer: E

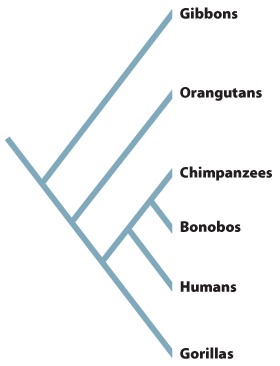
DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:evolutionary trees

*Use this evolutionary tree of humans and their closest relatives to answer Question 116.*

****

116. After chipanzees and bonobos, to whom are humans most closely related?

1. gibbons
2. orangutans
3. gorillas
4. gorillas and orangutans equally
5. gibbons and orangutans equally

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Medium

Important Words/Concepts:evolutionary trees

117.Which of the following BEST describes the three domains of life and their evolutionary relationships?

1. Prokarya and Archaea both consist of prokaryotic organisms, so they are more closely related to each other than either is to Eukarya.
2. Prokarya and Archaea both consist of prokaryotic organisms, but archaea is more closely related to Eukarya than it is to Prokarya.
3. Prokarya consists of prokaryotes, while both Archaea and Eukarya consist of eukaryotes. Archaea and Eukarya are more closely related to each other than either is to Prokarya.
4. Prokarya consists of prokaryotes, while both Archaea and Eukarya consist of eukaryotes. Prokarya, however, is more closely related to Eukarya than either is to Archaea.
5. None of the above.

Answer: B

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Medium

Important Words/Concepts:evolutionary trees

118. Which type of evolutionary tree is most useful to scientists, a tree based on similarity of appearance or phylogeny? Explain your answer and be sure to include the definition of phylogeny.

*Answer:* An evolutionary tree based on phylogeny is most useful because phylogeny reflects the evolutionary history of a species or group of species. Without such a tree, species that look alike due to convergent evolution might be placed in the same category.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Hard

Important Words/Concepts: phylogentic tree, taxonomy

119. All of the following are true of phylogenetic trees, EXCEPT

1. more primitive species are near the bottom, while more modern species are at the tips.
2. a node represents the last common ancestor of the species above that point in the tree.
3. phylogenetic trees show the evolutionary relationships among species.
4. DNA evidence has been very useful in determining relationships among species.
5. extinct species are never included in phylogenetic trees.

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

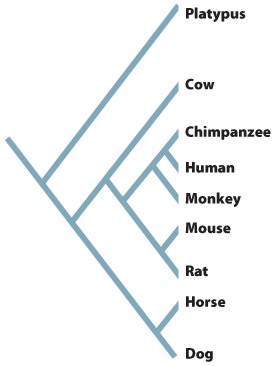
Type: Know It

Difficulty: Easy

Important Words/Concepts:phylogentic tree, taxonomy

120. Based on the phylogenetic tree below, all of the following are TRUE statements, EXCEPT

1. opossums are more closely related to cows than they are to the platypus.
2. mice and rats share a more recent common ancestor with humans, chimps, and monkeys than mice and rats share with horses and dogs.
3. mice and rats are more closely related to horses and dogs than they are to opossums.
4. horses and dogs are most closely related to the opossum.
5. humans and chimps are more closely related to each other than they are to other monkeys.

****

Answer: D

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Hard

Important Words/Concepts: phylogentic tree, taxonomy

121. Is a bird more closely related to a crocodile or an anole lizard? Explain.

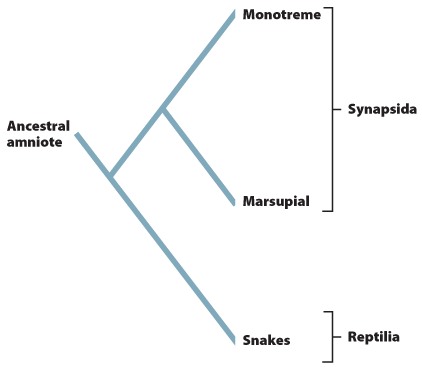
*Answer:*The bird and the crocodile share a more recent ancestor; so they are more closely related.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts: relationships

****

122. Based on the diagram above, compare how closely related monotremes and snakes are to marsupials.

*Answer:* Monotremes and marsupials share a synapsid ancestor as their closest relative. The closest ancestor snakes and marsupials share is the ancestral amniote, making them much less related to marsupials.

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Use It

Difficulty: Easy

Important Words/Concepts:relationships

123. The three domains have been identified by a comparison between organisms of

1. transfer RNA.
2. messenger RNA.
3. ribosomal RNA.
4. amino acids.
5. proteins.

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts:Archaea, bacteria, Eukarya, phylogentic tree, taxonomy

124. List the three currently recognized domains of life.

*Answer:* Bacteria, Archaea, and Eukarya

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts: Archaea, bacteria, Eukarya, phylogentic tree, taxonomy

125. Humans and other mammals belong to which of the following domains?

1. Archaea
2. Bacteria
3. Eukarya
4. Monera
5. Protista

Answer:C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:Eukarya, phylogentic tree, taxonomy

126. Domain Eukarya contains four major taxonomic groups. List at least three of them.

*Answer:*

protists

plants

fungi

animals

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts: Eukarya, phylogentic tree, taxonomy

127. Which of the following is a TRUEstatement about the three domains of life?

1. Prokaryotic life forms are only found in the bacteria domain.
2. Fungi are found in the Archaea domain.
3. Some animals are found in the Bacteria domain.
4. Some eukaryotic cells are found in the Archaea domain.
5. Archaea are more closely related to Eukarya than they are to Bacteria.

Answer: E

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Hard

Important Words/Concepts: Archaea, Bacteria, Eukarya, phylogentic tree, taxonomy

128. There are \_\_\_\_ domains.

1. 1
2. 2
3. 3
4. 4

Answer: C

DQ: What are the major groups of organisms, and how are organisms placed in groups?

Type: Know It

Difficulty: Easy

Important Words/Concepts:domains