Evolution and classification

BIO

Name _____ Class _____ Date _____

1 One explanation for the **variety** of organisms present on Earth today is that over time

A new species have adapted to fill available niches in the environment
B evolution has caused the appearance of organisms that are similar to each other
C each niche has changed to support a certain variety of organism
D the environment has remained unchanged, causing rapid evolution

2 Many scientists believe that the earliest cells on Earth were **relatively simple**, lacking nuclear membranes and other organized cellular structures. Over time, more **complex** cells developed from these simple cells. These statements describe the concept of

A inheritance of acquired characteristics
B evolution
C dominance
D use and disuse

3 In the early stages of development, the **embryos** of dogs, pigs, and humans resemble one another.

This observation suggests that these animals may have

A a similar number of chromosomes
B similar habitat requirements
C
D

4 The idea that **evolution** takes place at a continuous but very slow rate is known as

A succession
B artificial selection
C punctuated equilibrium
D gradualism

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A
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A organic compounds
B radioactive materials
C plant tissues
D animal embryos

B the genetic basis of variation
C survival of the fittest
D competition

9 In addition to the basic ideas of Darwin, **modern evolutionary theory** includes the concept that

A recombination of genes results in variation
B all acquired characteristics are inherited
C life originally came from outer space
D life of Earth began on land

10 In a population, 25% of the individuals show a certain recessive trait. According to the **Hardy-Weinberg principle**, the percent recessive genes for that trait in that population would be

A 5%
B 12.5%
C 25%
D 50%

	G	g
G	GG	Gg
g	Gg	gg

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ANSWER KEY

One explanation for the **variety** of organisms present on Earth today is that over time

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b

In the early stages of development, the **embryos** of dogs, pigs, and humans resemble one another.

This observation suggests that these animals may have

A a similar number of chromosomes
B similar habitat requirements
C the same blood components
D

d

The idea that **evolution** takes place at a continuous but very slow rate is known as

A succession
B artificial selection
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D gradualism

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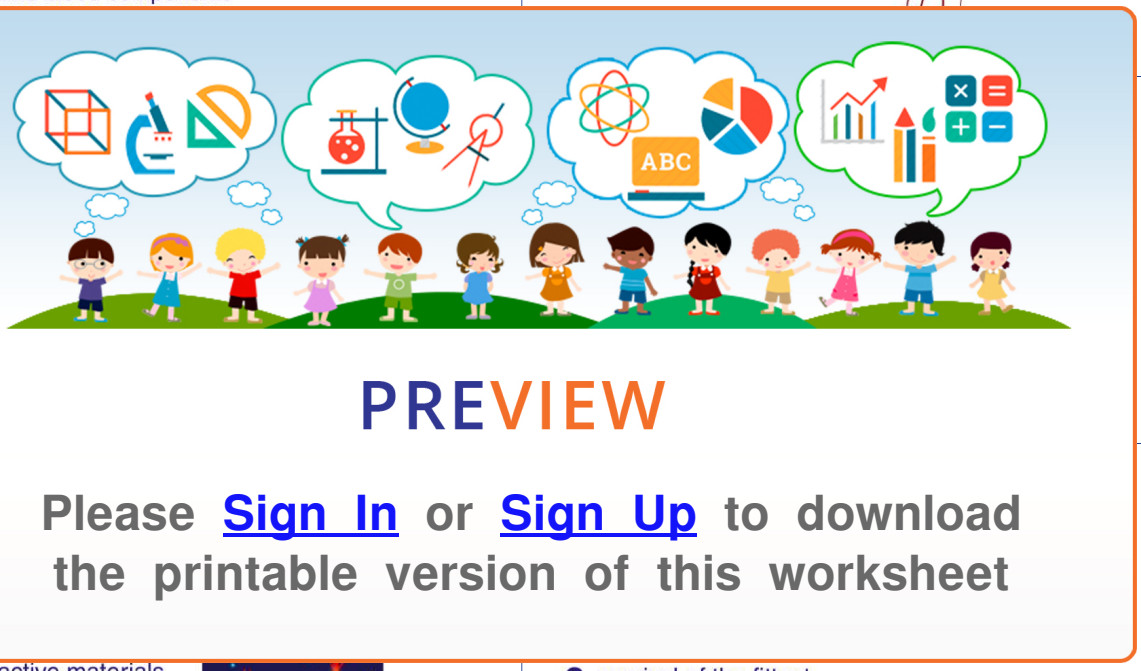

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