

3. Reading comprehension test

Directions: Read through the following three passages carefully and answer the questions below. Each reading passage is followed by some questions about it. Choose the best answer to each question and circle the letter of your choice.

Passage one

Time : 1hr

Charles Darwin's Theory of Evolution

Charles Darwin's Theory of Evolution is known as one of the most important and controversial scientific theories ever published. Darwin was an English scientist in the 19th century best known for his book "On the Origin of Species." In his book, Darwin postulated different species shared characteristics of common ancestors, that they branched off from common ancestors as they evolved, and that new traits and characteristics were a result of natural selection. **The theory is based on the assumptions that life developed from non-life and progressed and evolved in an indirect manner.** Therefore, the Theory of Evolution, while controversial, has shaped and influenced the modern scientific world's thinking on the development of life itself. Darwin was born February 12, 1809 in England. Although initially entering into medicine, Darwin chose to pursue his interest in natural science and embarked on a five-year journey aboard the H.M.S. Beagle, a British sloop belonging to the Royal Navy. Because of his experience aboard the Beagle, he laid the foundation for his Theory of Evolution while also establishing himself within the scientific community. Specifically, Darwin's keen observation of the fossils and wildlife he saw during his time on the Beagle served as the basis for the cornerstone of his theory: natural selection.

Natural selection contributes to the basis of Darwin's Theory of Evolution. One of the core tenets of Darwin's theory is that more offspring are always produced for a species than can possibly survive. Yet, no two offspring are perfectly alike. As a result, through random mutation and genetic drift, over time offspring develop new traits and characteristics. Over time beneficial traits and characteristics that promote survival will be kept in the gene pool while **those** that harm survival will be selected against. Therefore, this natural selection ensures that a species gradually improves itself over an extended duration of time. On the other hand, as a species continues to

'improve' itself, it branches out to create entirely new species that are no longer capable of reproducing together.

Through natural selection, organisms could branch off of each other and evolve to the point where they no longer belong to the same species. Consequently, simple organisms evolve into more complex and different organisms as species break away from one another. Natural selection parallels selective breeding employed by humans on domesticated animals for centuries. Namely, horse breeders will ensure that horses with particular characteristics, such as speed and endurance, are allowed to produce offspring while horses that do not share those above-average traits will not. Therefore, over several generations, the new offspring will already be pre-disposed towards being excellent racing horses.

Darwin's theory is that 'selective breeding' occurs in nature as 'natural selection' is the engine behind evolution. Thus, the theory provides an excellent basis for understanding how organisms change over time. Nevertheless, it is just a theory and elusively difficult to prove. One of the major holes in Darwin's theory revolves around "irreducibly complex systems." An irreducibly complex system is known as a system where many different parts must all operate together. As a result, in the absence of one, the system as a whole collapses. Consequently, as modern technology improves, science can identify these "irreducibly complex systems" even at microscopic levels. These complex systems, if so inter-reliant, would be resistant to Darwin's supposition of how evolution occurs. As Darwin himself admitted, "To suppose that the eye with all its inimitable contrivance for adjusting the focus for different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I free confess, absurd in the highest degree".

In conclusion, "On the Origin of Species" is known as one of the most **consequential** books ever published. Darwin's Theory of Evolution remains, to this day, a lightning rod for controversy. The theory can be observed repeatedly, but never proven, and there are a **plethora** of instances that cast doubt on the processes of natural selection and evolution. Darwin's conclusions were a result of keen observation and training as a naturalist. Despite the controversy that swirls around his

theory, Darwin remains one of the most influential scientists and naturalists ever born due to his Theory of Evolution.

1. **According to paragraph 1**, where did Charles Darwin begin to observe and formulate the basis for his Theory of Evolution?

A. Medical School B. Observing Horse Breeders C. England D. Aboard the H.M.S. Beagle

2. The word '**postulated**' in **paragraph 1** is closest in meaning to:

A. disagree B. prove C. oppose D. hypothesize

3. According to **paragraph 2**, what are the causes for species developing new traits and characteristics?

A. medicine and longevity

B. survival and selection

C. mutation and genetic drift

D. tenets and theory

4. According to **paragraph 3**, what is natural selection most comparable to as a process?

A. branching trees

B. selective breeding

C. irreducibly complex systems

D. the human eye

5. What is the purpose of **paragraph 3** in the passage?

A. To show the simple-to-complex nature of natural selection in context

B. To create doubt as to the validity of the theory

C. To contrast with the ideas presented in paragraph 2

D. To segue into the main point presented in paragraph

6. The word '**contrivance**' in **paragraph 4** is closest in meaning to:

A. organization B. retention C. absurdity D. systems

7. The word '**consequential**' in **paragraph 5** is closest in meaning to:

A. important B. measurable C. fragmented D. dismissible

8. All of the following are mentioned in **paragraph 4** as a viewpoint to state that natural selection is difficult to prove **EXCEPT**

A. The belief that the complexity of the human eye could have been formed by natural selection seems highly unlikely

- B. The presence of irreducibly complex system contradicts how evolution occurs
- C. Modern technology has been used to prove that irreducibly complex systems exists
- D. Selective breeding is the major hole in the theory of natural selection

9. The word '**plethora**' in **paragraph 5** is closest in meaning to:

- A. large
- B. sufficient
- C. essential
- D. prominent

10. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

Charles Darwin's Theory of Evolution was a revolutionary idea that described how natural selection influences the evolution of species.

- A. Natural selection explains how species change gradually over time.
- B. The Theory of Evolution describes how species 'branch out' from a common ancestor
- C. Creationists strongly object to the premise of the Theory of Evolution
- D. Charles Darwin originally enrolled to study medicine.
- E. The Theory of Evolution was proven by Darwin's book "On the Origin of Species."
- F. Both Darwin and "On the Origin of Species" are among the most influential things to happen to naturalist science

Passage two

Long before they can actually speak, babies pay special attention to the speech they hear around them. Within the first month of their lives, babies' responses to the sound of the human voice will be different from their responses to other sorts of auditory stimuli. Line They will stop crying when they hear a person talking, but not if they hear a **bell** or the sound of a **rattle**. At first, the sounds that an infant notices might be only those words that receive the heaviest emphasis and that often occur at the ends of utterances. By the time they are six or seven weeks old, babies can detect the difference between syllables pronounced with rising and falling inflections. Very soon, these differences in adult stress and intonation can influence babies' emotional states and behavior. Long before they develop actual language comprehension, babies can sense when an adult is playful or angry, attempting to initiate or terminate new behavior, and so on, merely on the basis of cues such as the rate, volume, and melody of adult speech.

Adults make it as easy as they can for babies to pick up a language by exaggerating such cues. One researcher observed babies and their mothers in six **diverse** cultures and found that, in all six languages, the mothers used simplified syntax, short utterances and nonsense sounds, and transformed certain sounds into baby talk. Other investigators have **noted** that when mothers talk to babies who are only a few months old, **they** exaggerate the pitch, loudness, and intensity of their words. They also exaggerate their facial expressions, hold vowels longer, and emphasize certain words.

More significant for language development than their response to general intonation is observation that tiny babies can make relatively fine distinctions between speech sounds. Other words, babies enter the world with the ability to make precisely those perceptual discriminations that are necessary if they are to acquire aural language.

Babies obviously derive pleasure from sound input, too: even as young as nine months they will listen to songs or stories, although the words themselves are beyond their understanding. For babies, language is a sensory-motor delight rather than the route to prosaic meaning that it often is for adults.

1. What does the passage **mainly** discuss?
 - (A) How babies differentiate between the sound of the human voice and other sounds
 - (B) The differences between a baby's and an adult's ability to comprehend language
 - (C) How babies perceive and respond to the human voice in their earliest stages of language development
 - (D) The response of babies to sounds other than the human voice
2. Why does the author mention a **bell** and a **rattle** in **lines 4-5**?
 - (A) To contrast the reactions of babies to human and nonhuman sounds
 - (B) To give examples of sounds that will cause a baby to cry
 - (C) To explain how babies distinguish between different nonhuman sounds
 - (D) To give examples of typical toys that babies do not like
3. The word "**diverse**" in **line 13** is closest in meaning to
 - (A) surrounding
 - (B) divided
 - (C) different
 - (D) stimulating

4. The word "**noted**" in **line 15** is closest in meaning to
(A) theorized (B) requested (C) disagreed (D) observed
5. The word "**They**" in **line 16** refers to
(A) mothers (B) investigators (C) babies (D) words
6. The passage mentions all of the following as ways adults modify their speech when talking to babies **EXCEPT**
(A) giving all words equal emphasis (B) speaking with shorter sentences
(C) speaking more loudly than normal (D) using meaningless sounds
7. The word "emphasize" in line 19 is closest in meaning to
(A) stress (B) repeat (C) explain (D) leave out
8. Which of the following can be inferred about the findings described in **paragraph 2**?
(A) Babies who are exposed to more than one language can speak earlier than babies exposed to a single language.
(B) Mothers from different cultures speak to their babies in similar ways.
(C) Babies ignore facial expressions in comprehending aural language.
(D) The mothers observed by the researchers were consciously teaching their babies to speak.
9. What point does the author make to illustrate that babies are born with the ability to acquire language?
(A) Babies begin to understand words in songs.
(B) Babies exaggerate their own sounds and expressions.
(C) Babies are more sensitive to sounds than are adults.
(D) Babies notice even minor differences between speech sounds.
10. According to the author, why do babies listen to songs and stories, even though they cannot understand them?
(A) They understand the rhythm.
(B) They enjoy the sound.
(C) They can remember them easily.
(D) They focus on the meaning of their parents' words

Passage three

All mammals feed their young. Beluga whale mothers, for example, nurse their calves for twenty months, until they are about to give birth again and their young are able to find their own food. The behavior of feeding of the young is built into the reproductive Line system. It is a nonelective part of parental care and the defining feature of a mammal, the most important thing that mammals--whether marsupials, platypuses, spiny anteaters, or placental mammals --have in common.

But not all animal parents, even those that **tend** their offspring to the point of hatching or birth, feed their young. Most egg-guarding fish do not, for the simple reason that their young are so much smaller than the parents and eat food that is also much smaller than the food eaten by adults. In reptiles, the crocodile mother protects her young after they have hatched and takes them down to the water, where they will find food, but she does not actually feed them. Few insects feed their young after hatching, but some make other arrangement, **provisioning** their cells and nests with caterpillars and spiders that they have paralyzed with their venom and stored in a state of suspended animation so that their larvae might have a supply of fresh food when they hatch.

For animals other than mammals, then, feeding is not intrinsic to parental care. Animals add it to their reproductive strategies to give them an **edge** in their lifelong quest for descendants. The most vulnerable moment in any animal's life is when it first finds itself completely on its own, when it must forage and fend for itself. Feeding postpones that moment until a young animal has grown to such a size that **it** is better able to cope. Young that are fed by their parents become nutritionally independent at a much greater fraction of their full adult size. And in the meantime those young are **shielded** against the vagaries of fluctuating of difficult-to-find supplies. Once a species does take the step of feeding its young, the young become totally dependent on the extra effort. If both parents are removed, the young generally do no survive.

1. What does the passage **mainly** discuss?

- (A) The care that various animals give to their offspring.
- (B) The difficulties young animals face in obtaining food.
- (C) The methods that mammals use to nurse their young.
- (D) The importance among young mammals of becoming independent.

2. The author lists various animals in **line 5** to

- (A) contrast the feeding habits of different types of mammals
 - (B) describe the process by which mammals came to be defined
 - (C) emphasize the point that every type of mammal feeds its own young
 - (D) explain why a particular feature of mammals is nonelective
3. The word "**tend**" in **line 6** is closest in meaning to
- (A) sit on (B) move (C) notice (D) care for
4. What can be inferred from the passage about the practice of animal parents feeding their young?
- (A) It is unknown among fish. (B) It is unrelated to the size of the young.
 - (C) It is dangerous for the parents. (D) It is most common among mammals.
5. The word "**provisioning**" in **line 11** is closest in meaning to
- (A) supplying (B) preparing (C) building (D) expanding
6. According to the passage, how do some insects make sure their young have food?
- (A) By storing food near their young.
 - (B) By locating their nests or cells near spiders and caterpillars.
 - (C) By searching for food some distance from their nest.
 - (D) By gathering food from a nearby water source.
7. The word "**edge**" in **line 15** is closest in meaning to
- (A) opportunity (B) advantage (C) purpose (D) rest
8. The word "**it**" in **line 18** refers to
- (A) feeding (B) moment (C) young animal (D) size
9. According to the passage, animal young are most defenseless when
- (A) their parents are away searching for food
 - (B) their parents have many young to feed
 - (C) they are only a few days old
 - (D) they first become independent
10. The word "**shielded**" in **line 20** is closest in meaning to
- (A) raised (B) protected (C) hatched (D) valued