Task 1. Read the text and answer the questions below.

A. Are we currently experiencing a sixth extinction due to human activities destroying ecosystems and reducing biodiversity? Many ecologists think so, but we can't be sure because we lack a comprehensive understanding of changes between extinction events or what happened during previous ones. We don't even know the exact number of existing species today or the rate at which they are becoming extinct. A new initiative, the Paleobiology Database, aims to bridge these knowledge gaps. It seeks to be an extensive online repository of every fossil ever discovered, akin to the Human Genome Project for biodiversity. The goal is to understand how past environmental changes shaped life on Earth and predict future changes. This database might reveal whether life can always recover from mass extinctions or if human-induced extinction could permanently alter these dynamics.

B. However, the project faces significant criticism. Some experts argue that its data is incomplete and flawed, as it relies on the fossils discovered so far, which represent only a fraction of all species that ever existed. They believe more fieldwork to unearth new fossils is necessary. Others doubt the completeness of the fossil record, highlighting its gaps and biases.

C. Proponents of the Paleobiology Database acknowledge its limitations but see value in identifying global patterns of biodiversity changes. John Alroy from the National Center for Ecological Analysis and Synthesis believes the fossil record helps understand normal biodiversity and extinction processes. This understanding can provide a benchmark for assessing the severity of the current mass extinction.

D. The Paleobiology Database aims to create detailed global diversity curves, with scientists worldwide contributing data on fossil finds daily. Since its inception in 1998, it has catalogued nearly 340,000 specimens. The database has already produced surprising results, such as the hypothesis that biodiversity reached a plateau long ago, challenging the belief that species numbers have continuously increased between extinctions. This suggests a maximum number of species that Earth can support at any given time, with new species emerging only as others go extinct or after rare catastrophic events.

E. Alroy has also used the database to examine species classification accuracy, finding that poor communication and misidentification often result in multiple names for a single species, inflating species counts by 32 to 44 percent. Correcting these errors can prevent misleading diversity spikes in data.

F. The fossil record's patchiness is undeniable, with some regions and periods better represented than others. Certain creatures, particularly those with hard parts living in oceans, are more likely to fossilize, while others, like jellyfish, leave no trace. Alroy estimates that only 41 percent of North American mammal species are known from fossils, a likely trend for other groups as well.

G. Not everyone is convinced by the database's statistical methods. Jonathan Adrain from the University of Iowa warns that such techniques can create false mass extinctions. Misinterpretation of data, influenced by sea level changes or inconsistent sampling, can mimic major biodiversity changes. For example, a study on marine bivalve fossils suggests their diversity has steadily increased over the past 5 million years.

H. A comprehensive inventory of all living species could help ecologists contextualize the current biodiversity crisis. The San Francisco-based ALL Species Foundation aims to create such a list within 25 years. Harvard biologist Edward O. Wilson emphasizes the urgency of this task due to the alarming extinction rates. Detailed information is needed to protect biodiversity effectively, highlighting the importance of continued counting efforts.

_____1. **What is the primary goal of the Paleobiology Database?**

A. To track current species extinction rates.

B. To serve as a comprehensive online repository of all discovered fossils.

C. To compare human-induced extinctions with past extinction events.

_____2. **Why do some experts criticize the Paleobiology Database?**

A. It uses outdated technology.

B. It duplicates existing research efforts.

C. It relies on incomplete fossil records.

_____3. **According to John Alroy, what is the fossil record useful for?**

A. Predicting future climate changes.

B. Identifying new fossil species.

C. Understanding normal biodiversity and extinction processes.

_____4. **What surprising result has the Paleobiology Database revealed about biodiversity?**

A. It reached a plateau long ago.

B. It has decreased continuously between extinction events.

C. It has always increased steadily over time.

_____5. **How do classification errors affect the fossil record, according to Alroy?**

A. They have no significant impact on the data.

B. They create misleading diversity spikes.

C. They reduce the number of identified species.

_____6. **What does Alroy estimate about North American mammal fossils?**

A. Only a small percentage have been discovered.

B. Most species have left complete fossil records.

C. The majority are accurately classified.

_____7. **What concern does Jonathan Adrain express about statistical methods used in the database?**

A. They can falsely indicate mass extinctions.

B. They are too complex for practical use.

C. They overlook important species.

_____8. **What does Edward O. Wilson emphasize as critical for protecting biodiversity?**

A. Halting all fossil fuel usage.

B. Focusing solely on endangered species protection.

C. Creating a comprehensive list of all living species.

Task 2. Read the text carefully (paragraphs A-C) and find synonyms for the given words within the text. Write down the original word and its synonym from the text.

- **Thorough**   _____

- **Project**   _____

- **Wide-ranging**   _____

- **Major**   _____

- **Doubt**   _____

- **Discover**   _____

Task 3. Choose the correct option to fill in the gaps.

The world's quietest railway station

Some of the world's most heavily used railway stations are **(1)**…………… in Japan. According to **(2)**……………, 45 out of the 51 busiest in the world are in the country. Some 3.6 million passengers travel through the busiest railway station, Shinjuku Station in Tokyo, every **(3)**…………… day.

But surprisingly, this small but **(4)**…………… populated country also has some stations which are hardly used at all. Kyu-Shirataki Station, on the island of Hokkaido is in such a **(5)**…………… place that it was only used by one person for a few years. High school student Kana Harada was a **(6)**…………… passenger before it closed in 2016. The train stopped every morning to take high school student Kana Harada to school, and every afternoon to drop her back at Kyu-Shirataki.

But keeping the station open for just one passenger simply was not **(7)**…………… . Therefore the operator of the line, Hokkaido Railway Company, planned to close the station **(8)**…………… . But when they found out that this would leave Kana with no **(9)**……………, they agreed to keep the line open until she graduated from school. Although trains still use the line, the station itself is now completely abandoned.

Task 4. Read the text. 7 parts were removed from the text. Choose from the sentences (A-I) the one that best fits each gap (1-7). There are 2 options which you needn't use.

You carry around a three-pound mass of wrinkly material in your head that controls every single thing you will ever do. From enabling you to think, learn, create, and feel emotions to controlling every blink, breath, and heartbeat – this fantastic control center is your brain. 1)_____ in the foreword to Discovering the Brain, famous scientist James Watson wrote, "The brain is the most complex thing we have yet discovered in our universe. It contains hundreds of billions of cells 2)_____. The brain confuses the mind." Obviously to understand brain function, we need to confront its complexity. Imagine your kitten is on the kitchen

counter. She's about to step onto a stove. You have only seconds to act. Accessing the signals coming from your eyes, 3)_____ you will need to dive to intercept her. Then it orders your muscles to do so. Your timing is perfect and she's safe. No computer can 4)_____ to download, process, and react to the flood of information coming from your eyes, ears, and other sensory organs. Your brain contains about 100 billion microscopic cells called neurons – so many it would take you over 3,000 years to count them all. Whenever you dream, laugh, think, see, or move, 5)_____ along billions of tiny neuron highways. Believe it or not, the activity in your brain never stops. Countless messages zip around inside it every second like a supercharged pinball machine. Your neurons create and send more messages than all the phones in the entire world. 6)_____, all your neurons together can generate enough electricity to power a low-wattage bulb. Neurons send information to your brain at more than 150 miles (241 kilometers) per hour. For example, a bee lands on your bare foot. Sensory neurons in your skin relay this information to your spinal cord and brain at a speed of more than 150 miles (241 kilometers) per hour. Your brain then uses motor neurons 7)_____ to shake the bee off quickly. Motor neurons can relay this information at more than 200 miles (322 kilometers) per hour.

a) and while a single neuron generates only a tiny amount of electricity

b) interlinked through trillions of connections

c) come close to your brain's awesome ability

d) making it a subject of endless fascination for scientists and researchers.

e) to transmit the message back through your spinal cord to your foot

f) traditional computers require manual updates and maintenance

g) It is a structure so amazing that

h) it's because tiny chemical and electrical signals are racing between these neurons

i) your brain quickly calculates when, where, and at what speed