

Reading Passage 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 1 below.

It is in everyone's pocket, and we feel ill at ease when it is not. The ubiquitous mobile phone. The world of technology has come a long way since the first mobile phone was invented in 1973. From bulky and awkward to use to the sleek and powerful smartphones of today, the evolution of the mobile phone has been rapid and impressive. To celebrate its fiftieth birthday, we will explore the history of mobile phones and how they have changed the way we communicate. We are also going to take a look at some of the most popular smartphones on the market today and how they are revolutionizing the way we interact with the world around us.

The Motorola DynaTAC 8000X was the first cellular phone that the general public could buy. It was released in 1983, and it was also the first mobile phone to meet the FCC's stringent requirements for mobile phone use. The phone was designed to be used with the Motorola Cellular Network, which was the first cellular network in the United States. It had a weight of 28 ounces, and it was 9 inches tall. It had a black and white LCD display, and it had a numeric keypad for dialing numbers. The phone had a battery life of up to 30 minutes of talk time, and it could store 30 phone numbers in its memory. It also had a built-in speakerphone for hands-free conversations. Finally, it had an antenna that could be extended to improve reception, and came complete with car charger compatibility. The phone was considered a luxury item at the time, and it cost around \$3,995. It was a revolutionary device that changed the way people communicated and paved the way for the modern mobile phone.

The company that is credited with having made mobile phones affordable is Nokia. Contrary to popular belief, the company is not Japanese but Finnish. The impact of Nokia on the mobile phone market has been immense. The company is responsible for introducing a number of innovative features, such as the first colour screens, the first mobile phone sporting a built-in camera, and the ability to access the Internet. Nokia has also been instrumental in developing the technology behind 3G and 4G networks, allowing mobile phones to access high-speed data networks. Nokia has also had a major influence on the design direction in the industry. Its iconic Nokia 3310 was a huge hit when it was released in 2000, selling over 126 million units worldwide, and its appearance has been copied by many other manufacturers.

The most commercially successful mobile phone of all time is the renowned Apple iPhone. The iPhone was first released in 2007 and was an instant success. While it wasn't the first smartphone, it introduced the concept of a multi-functional touchscreen that dominates the body of the phone with a minimal number of physical buttons. The idea of an app store where users could download

thousands of apps redefined the industry of mobile software. Even though neither of these two concepts were novel, their smart implementation shaped the industry for years to come. The iPhone was so successful that it gave way to a whole new era of similar devices, and to this day it remains the dominant force on the market, shaping the phones of the future. It is no wonder that it has gone through over ten generations, each improving on almost every single technological aspect of the device. Small wonder that, largely thanks to the iPhone, Apple became the most valuable company in the world.

The country that has the most cellphones per capita is the United Arab Emirates. This is mainly due to the country's high disposable income as well as its strong infrastructure and connectivity. The UAE has been investing heavily in its telecoms sector, resulting in mobile networks and Internet speeds that are among the highest. It has one of the highest mobile penetration rates in the world, with more than 200 million active subscribers. Finally, the UAE is a popular tourist destination that has millions of people visiting it every year. This means that the country has to keep up with the latest trends in mobile technology in order to meet the needs of its visitors.

Despite the indisputable advantages that cellphones offer, there are a number of drawbacks to keep in mind. While many believe that one of the biggest risks is the radiation emitted by the gadget, statistics show otherwise. People nowadays are too distracted to pay attention to their surroundings, which in some cases leads to serious injury or even death. The infamous "driving and texting" is the main culprit, leading to a staggering 1.6 million traffic accidents each year, according to the National Safety Council. Another issue to consider is the increasing social isolation that mobile devices bring about. People nowadays prefer texting to face-to-face communication. Finally, with all the information such as credit card numbers and other sensitive data stored on our phones they potentially pose a very serious security threat – a fact that many people simply fail to realise. Taking a look at today's latest models, it is difficult to wrap your mind around what huge headway the technology has made. Modern devices are almost as powerful as full-fledged computers. The cameras can rival those of dedicated devices, the sound is crystal clear, and the battery can last for days. Perhaps the real paradigm changer though is the fact of how reliant we have grown on these little things and how much worse we would have been without them. It would definitely make us appreciate them more.

Questions 1-7

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1-7 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. Initially, mobile phones were considerably heavier than they are now
2. The first mobile phone was sold in 1973
3. Motorola pioneered the mobile phone market
4. The USA was the first country to have cellular network coverage
5. Motorola DynaTAC 8000X could be controlled using voice
6. Motorola introduced phone cameras to the market
7. Mobile access to the Internet was only made possible by iPhone

Questions 8 and 9

According to the text, which **TWO** facts are true about the iPhone?

- A it was the first phone with a touchscreen
- B it was the first to offer downloadable software
- C the phone was immediately accepted by the public
- D the phone only had one button
- E it is a trendsetter of the industry

Questions 10-13

Using **NO MORE THAN ONE WORD** from the passage, complete the summary

While mobile phones are indispensable in our daily lives, they pose certain **10** ___ to the user. Even though many argue that it is **11** ___ emitted by the device, the facts point at something entirely different.

The truth is one might get too **12** ___ when talking on the phone or sending messages, which can potentially lead to very serious consequences. **13** ___ concern is another thing to keep in mind, as phones store lots of sensitive data that can be easily compromised.

Reading Passage 2

You should spend about 20 minutes on Questions 14-28, which are based on Reading Passage 2 on the following pages.

A What inventions have changed the way we live for the better? If you set out to ask this question, most people will name the invention of the wheel or electricity. Younger respondents might come up with something recent, like the Internet. The more educated could remember the printing press. However, very few are likely to mention discovering the method of producing glass, despite its ubiquity and how long it has been around. So, is glass the underdog invention of human civilization?

B Glass is an amorphous solid material that is transparent and brittle. It is composed of silica, sodium oxide, and calcium oxide. It is hard and has a high melting point. It is also a good insulator, meaning that it does not conduct electricity, and can be used to transmit light. Glass has a low coefficient of thermal expansion – in other words, it does not expand or contract much when exposed to heat or cold. It is also resistant to corrosion and does not react with many chemicals, making it perfect for outdoor applications, especially when it has to be exposed to the elements.

C Glass has been around for millions of years, but it wasn't until about 3500 BC, effectively predating iron smelting, that humanity managed to produce it artificially. The earliest known use of glass can be tracked down to Mesopotamia, in the form of beads and other decorative objects. Around 1500 BC, glassmakers in Lebanon began creating glass by heating sand and other ingredients in a furnace. This process, known as glass blowing, made it possible to give the molten glass a variety of shapes and sizes. This method was used to make windows and primitive lenses, as well as decorative objects. In the first century AD, artisans in Rome pioneered the method of mixing glass, sand, and other ingredients with lead oxide. Referred to as glass staining, this technique allowed the introduction of colours and texture alteration of glass.

D It is worth noting that glass is technically not a human invention, as it occurs naturally in various forms. It is most commonly formed when certain types of rocks are heated to high temperatures and then cooled quickly. Such glass can be found in the form of obsidian – a black, glass-like rock, and tektites, which are small, glassy objects that are thought to have been created by meteorite impacts. Fulgurite is probably the first form of glass, colloquially referred to as natural glass, which is formed when lightning strikes a sandy beach or desert. The intense heat melts the sand and creates a glass-like material. To the uninitiated, however, it won't look like glass at all, as it is usually impossible to see anything through it. The few natural examples of this material that do look man-made are usually not transparent, but translucent – you can see light coming through

them, but it is difficult to make out the object on the other side. The latter is one of the hallmark qualities of “real” glass.

E Glass has been used by humans for thousands of years, and its usage has only grown over time. From windows to drinking vessels, glass has become an integral part of our lives. Today, glass is needed in a variety of industries, ranging from construction to medicine. In construction, glass is found in windows, doors, and skylights. These allow natural light to enter a building, reducing the need for artificial lighting and thus saving energy. Glass is also indispensable in conservatories and greenhouses, which help regulate temperatures and ensure an optimal environment for plants. The automotive industry would probably not even exist without it – windshields and lights being only a few examples of how this material can be used there. Food and drink containers made of glass are said to better preserve the taste and aroma.

F Glass is created through a process known as smelting, which involves heating sand, soda ash, and limestone at extremely high temperatures. One of the unwanted consequences of this is the infamous carbon dioxide, a greenhouse gas that gets released into the atmosphere. Additionally, the production requires a large amount of energy, which is often generated from burning fossil fuels, thereby indirectly contributing to further environmental damage. Glass production also requires the use of chemicals such as sulfuric acid that is harmful to the environment if not properly disposed of. Furthermore, the disposal of glass can be problematic. Glass is not biodegradable, so it can take thousands of years to decompose, and it is not easily recycled. As a result, it often ends up in landfills, where it takes up valuable space, and while the material itself is chemically stable and therefore does not cause damage, the sheer amount of it still presents a problem.

G Like most things, glass as a material has its limitations. It is not always the best choice due to its fragility, weight, and cost. Nowadays, there are materials that can serve as a substitute for glass, offering the same or better performance depending on the application. One of them is polycarbonate. It is a thermoplastic that is lightweight, strong, and shatter-resistant – it does not break into multiple small pieces if damaged. It is often used in place of glass for things like bulletproof windows, safety shields or eye protection. Another sphere of wide adoption is in the automotive industry, where its shatterproof qualities proved irreplaceable when making headlights, taillights, and windshields.

H So, what does the future hold for glass? A lot of uncertainty is the only thing that can be said for sure! Even though glass itself is more eco-friendly than comparable materials such as plastic and its many derivatives, making, transporting and disposing of it entails higher financial and ecological

overheads. This is the main reason why the glass bottle that ruled the supermarket shelves till the late nineties is a rare sight nowadays, replaced by a more versatile, even if less charismatic plastic counterpart. And it's just a taste of things to come.

Questions 14-21

Reading Passage 1 has eight paragraphs labelled **A-I**.

Choose the most suitable headings for paragraphs **B-I** from the list of headings below.

Write the appropriate numbers (**I-XII**) in boxes **14-20** on your answer sheet.

One of the headings has been done for you as an example.

Note: There are more headings than paragraphs, so you will not use all of them.

Example: Paragraph A — Answer III

List of Headings I Glass in nature II Bottles to be banned III Underappreciated IV How to use glass V Taking a closer look VI Dim prospects VIII Through the looking glass of time IX Taking a toll on nature X A thousand applications XI Not without a fault XII Irreplaceable – or is it?	14 Paragraph B 15 Paragraph C 16 Paragraph D 17 Paragraph E 18 Paragraph F 19 Paragraph G 20 Paragraph H
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Questions 21-24

In boxes 21-25 on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

21 Glass is not the first thing that comes to mind as a groundbreaking invention

22 As a material, glass became popular owing to its practicality when used outside

23 Iron smelting was invented before production of glass was possible

24 Introducing additives to the mixture enabled glass to have various desirable properties

Questions 25-29

Choose the appropriate letters A- C and write them in boxes 9-15 on your answer sheet.

25 Glass that occurs naturally

- A** Shares few desirable properties with artificial glass
- B** Can mostly be found in desert landscapes
- C** Is prized for its unique properties

26 The main ecological concern when it comes to glass is that

- A** Its production creates an undesirable by-product
- B** Glass fragments contain sulfuric acid
- C** Burying it underground requires special safety measures

27 Polycarbonate is chosen over traditional glass primarily because

- A** It is cheaper to make
- B** It provides certain safety benefits
- C** It is eco-friendly

28 What does the author imply in the closing sentence of the text?

- A** The taste of liquids held in bottles is likely to be affected by plastic
- B** Bottles are likely to find new application in the future
- C** The replacement trend is likely to continue

Reading Passage 3

You should spend about 20 minutes on Questions 29-40, which are based on Reading Passage 3 below.

Monkeys are fascinating creatures that have been a source of wonder and curiosity for many people throughout history. These intelligent animals capture our imagination with their impressive agility, social behaviour, and even their similarities to humans – unsurprisingly so, as they have been scientifically proven to be our distant genetic relatives.

This relation is primarily based on their shared genetic makeup. Studies have shown that monkeys and humans have a high percentage of genetic similarity, which indicates a common evolutionary ancestry. Additionally, both monkeys and humans belong to the same scientific order, primates. This classification means that they possess many anatomical and behavioural characteristics that are not found in other animal groups. Fossil evidence has also provided insights into the evolutionary relationship between monkeys and humans. Fossils of early primates, such as Proconsul and

Aegyptopithecus, have features that resemble both monkeys and humans, suggesting that they were ancestral to both groups.

There are more than 200 species of monkeys, and each one has its own distinctive traits, ranging from the red-tailed monkey's long tail to the mandrill's colourful face. But today we would like to focus on three notable species: the chimpanzee, the howler monkey, and the spider monkey.

The Chimpanzee

Chimpanzees are among the most intelligent primates, with cognitive abilities that are comparable to those of human children. They are natural problem-solvers and boast a high level of emotional intelligence. In fact, studies have shown that chimpanzees are capable of understanding the emotions of others and even displaying empathy towards their peers.

Chimpanzees are found in the forests of central and western Africa, in numbers of up to 100 individuals. Such groups normally have leaders, either male or female chimpanzees. Chimpanzees are primarily herbivorous – but will also eat insects, birds, and small mammals when the opportunity arises – effectively making them omnivorous.

One of the most notable characteristics of chimpanzees is their ability to use tools. They have been observed using sharp sticks to extract insects from tree bark, bashing stones on nuts to crack them open, and even wrapping their faces in big leaves as protection from rain! Some chimpanzees have been known to fashion primitive weapons such as spears and use them to hunt small game. Scientists have observed a wide range of social interaction among chimpanzees, including grooming, hugging, and kissing. They also engage in aggressive behaviors, such as screaming, hitting, and biting, when there is conflict within the group. While the latter is not indicative of animals of higher intellectual order, the former shows signs of the empathy mentioned earlier, which is generally uncommon among animals.

Sadly, chimpanzees are endangered due to habitat loss and hunting. Many are also captured for the illegal pet trade, which has contributed to their decline. However, conservation efforts are underway to protect these remarkable animals and their habitats.

The Howler Monkey

Howler monkeys are one of the most vocal primates, and their distinctive calls can be heard up to three miles away. They are, in fact, one of the loudest animals on Earth, rivaled by the much bigger blue whale and lion. They are found in the forests of Central and South America and can live up to 20 years in the wild.

The howler monkey is a large and slow-moving animal, with males weighing up to 22 pounds and females weighing up to 16 pounds. They are primarily herbivorous and feed on leaves, fruits, and flowers.

Howler monkeys are arboreal animals, meaning they spend most of their time in trees. They have a prehensile tail, which acts like another limb and enables them to grasp onto branches tightly. This feature is particularly important for mother monkeys, who use their tails to carry their young as they move from tree to tree.

Howler monkeys are also notable for their social behaviours. Like all monkeys they tend to form groups, which consist of a dominant male, several females, and their offspring. The male is responsible for protecting his group from predators, while the females take care of the young. They are also very territorial, with males using their howl to intimidate as well as to signal their position. Interestingly enough, female Howlers do not howl at all. In terms of conservation, howler monkeys face a variety of threats; the biggest one is deforestation of the Amazon rainforest, their prime habitat.

The Spider Monkey

Spider monkeys are known for their long limbs and tails, which enable them to move through trees with great agility. They are found in the forests of Central and South America, where they live in groups of up to 35 individuals. Similar to the Howler Monkey, they are chiefly arboreal, mostly living in the trees, preferring not to get down to the ground without a compelling reason.

The name comes from their tail, which they effectively use as a fifth limb that facilitates locomotion and helps them clear various obstacles with surprising ease. Because of the five limbs taking part in the process they visually resemble a spider crawling.

Spider monkeys are omnivorous and have a varied diet of fruits, leaves, flowers, and insects. They have a distinctive jaw structure that enables them to crack open hard nuts and seeds without having to resort to tools for that.

Mother spider monkeys carry their young on their backs for the first few months of their lives, similarly to the Howler Monkey using their tail as a safety belt for their offspring. Once the baby is old enough, it will learn how to move from tree to tree and eventually become independent.

The Spider Monkey is one species that especially suffers from forest fragmentation. This is a situation when a continuous forest breaks up into smaller and isolated patches due to human activities such as agriculture, urbanization, and road building.

Despite their stark differences, there is one disturbing similarity among these three species. All three are, in one way or another, facing the risk of extinction – a situation that is shameful, especially given human understanding of how important biodiversity is.

Questions 29-36

Complete the table below.

Choose **NO MORE THAN ONE WORD AND/OR A NUMBER** for each answer.

	Chimpanzee	Howler Monkey	Spider Monkey
Habitat	Central and Western Africa	Central and South Americas	Central and South Americas, predominantly 29 _____
Social and diet habits	Groups of up to 30 _____ specimen; largely omnivorous	Diet is mostly 31 _____. Males live with several females	Omnivorous, has no need for 32 _____ to eat nuts. Lives in larger groups
Peculiarity	Demonstrate 33 _____ towards others; highly intelligent	Impressive 34 _____ abilities	Extremely developed tail that aids 35 _____ as well as ensuring offspring safety
Endangerment status	Endangered	Loss of 36 _____	Suffer from forest fragmentation

Questions 37-40

For each question, choose the appropriate letter **A-C**

37. Monkeys and human are believed to be related because

- A** They are genetically identical
- B** They are uniquely similar in certain respects
- C** They possess anatomic resemblance

38. One peculiarity that makes Chimpanzee stand out is the fact they

- A** Like humans, make use of makeshift tools
- B** Prefer to live in larger social groups
- C** Favour mostly plant-based foods

39. What behavioural activities point at higher cognitive development among chimpanzees?

A grooming, kissing and hugging

B biting, screaming and hitting

C neither of these

40. Which monkey species is mentioned to have clearly defined gender roles?

A the chimpanzee

B the howler monkey

C the spider monkey