

## **This Marvellous Invention**

**A - Why language is the most important invention of all**

**Of all mankind's manifold creations, language must take pride of place. Other inventions -the wheel, agriculture, sliced bread - may have transformed our material existence, but the advent of language is what made us human. Compared to language, all other inventions pale in significance, since everything we have ever achieved depends on language and originates from it. Without language, we could never have embarked on our ascent to unparalleled power over all other animals, and even over nature itself.**

**B - Apparently incompatible characteristics of language**

**But language is foremost not just because it came first. In its own right it is a tool of extraordinary sophistication, yet based on an idea of ingenious simplicity: 'this marvellous invention of composing out of twenty-five or thirty sounds that infinite variety of expressions which, whilst having in themselves no likeness to what is in our mind, allow us to disclose to others its whole secret, and to make known to those who cannot penetrate it all that we imagine, and all the various stirrings of our soul' .This was how, in 1660, the renowned French grammarians of the Port-Royal abbey near Versailles distilled the essence of language, and no one since has celebrated more eloquently the magnitude of its achievement. Even so, there is just one flaw in all these hymns of praise, for the homage to language's unique accomplishment conceals a simple yet critical incongruity. Language is mankind's greatest invention - except, of course, that it was never invented. This apparent paradox is at the core of our fascination with language, and it holds many of its secrets.**

**C - The way in which a few sounds are organised to convey a huge range of meaning**

Language often seems so skillfully drafted that one can hardly imagine it as anything other than the perfected handiwork of a master craftsman. How else could this instrument make so much out of barely three dozen measly morsels of sound? In themselves, these configurations of mouth p,f,b,v,t,d,k,g,sh,a,e and so on - amount to nothing more than a few haphazard spits and splutters, random noises with no meaning, no ability to express, no power to explain. But run them through the cogs and wheels of the language machine, let it arrange them in some very special orders, and there is nothing that these meaningless streams of air cannot do: from sighing the interminable boredom of existence to unravelling the fundamental order of the universe.

**D - The universal ability to use language**

The most extraordinary thing about language, however, is that one doesn't have to be a genius to set its wheels in motion. The language machine allows just about everybody from pre-modern foragers in the subtropical savannah, to post-modern philosophers in the suburban sprawl - to tie these meaningless sounds together into an infinite variety of subtle senses, and all apparently without the slightest exertion. Yet it is precisely this deceptive ease which makes language a victim of its own success, since in everyday life its triumphs are usually taken for granted. The wheels of language run so smoothly that one rarely bothers to stop and think about all the resourcefulness and expertise that must have gone into making it tick. Language conceals art.

**E - Differences between languages highlight their impressiveness**

**Often, it is only the estrangement of foreign tongues, with their many exotic and outlandish features, that brings home the wonder of languages design. One of the showiest stunts that some languages can pull off is an ability to build up words of breath-breaking length, and thus express in one word what English takes a whole sentence to say. The Turkish word *çehirliliçtirmediklerimizdensiniz*, to take one example, means nothing less than ‘you are one of those whom we can’t turn into a town-dweller’. (In case you were wondering, this monstrosity really is one word, not merely many different words squashed together - most of its components cannot even stand up on their own.)**

**F - Even silence can be meaningful**

**And if that sounds like some one-off freak, then consider Sumerian, the language spoken on the banks of the Euphrates some 5,000 years ago by the people who invented writing and thus enabled the documentation of history. A Sumerian word like *munintuma'a* (‘when he had made it suitable for her’) might seem rather trim compared to the Turkish colossus above. What is so impressive about it, however, is not its lengthiness but rather the reverse - the thrifty compactness of its construction. The word is made up of different slots, each corresponding to a particular portion of meaning. This sleek design allows single sounds to convey useful information, and in fact even the absence of a sound has been enlisted to express something specific. If you were to ask which bit in the Sumerian word corresponds to the pronoun ‘it’ in the English translation ‘when he had made it suitable for her’, then the answer would have to be**

nothing. Mind you, a very particular kind of nothing: the nothing that stands in the empty slot in the middle. The technology is so fine-tuned then that even a non-sound, when carefully placed in a particular position, has been invested with a specific function. Who could possibly have come up with such a nifty contraption?

### Questions 9-10

Complete the summary using the list of words, A-G, below.

Write the correct letter, A-G, in boxes 9-10 on your answer sheet.

#### The importance of language

The wheel is one invention that has had a major impact on 7 \_\_\_\_\_ aspects of life, but no impact has been as 8 \_\_\_\_\_ as that of language. Language is very 9 \_\_\_\_\_, yet composed of just a small number of sounds. Language appears to be 10 \_\_\_\_\_ to use. However, its sophistication is often overlooked.

## Evolution Of Museums

### Part A

The very first museums of the world were private collections of objects by wealthy people and institutions. The objects in these museums were displayed in Cabinets of Curiosities, also called Cabinets of Wonder or Wonder Rooms. The word “cabinet” was then used to describe a room and not a piece of furniture. The oldest recorded example of such was the Ennigaldi Nanna’s museum that was located in Mesopotamia. It was founded in 530 BC.

**Before the 18th century, only elite or respectable members of society, by the standards of that era, could visit museums with permission from the owner and the staff. The first museums to be opened for the general public were the British Museum in London in 1759 and the Uffizi Gallery in Florence in 1765. However, even though they were no longer exclusive places, only people from the middle and upper class were privileged with a written permission request. Also, the visitations were often limited to a few hours. The first public museum in its true sense was the Louvre in Paris which was opened in 1793 to people of any status and age, emerging as an agent of nationalistic fervor.**

**In the late nineteenth and early twentieth centuries, societies began to regard museums as centers of the production of new knowledge. Historical museums shifted focus to display scientific discoveries and artistic developments with collections that could be useful for research also. Over the twentieth century, as cities increased in size, wealth, and population, more museums developed. These were shaped by the public response to education and entertainment. Greater funding was directed towards the development of modern museums. Study programs dedicated to the field of art and culture were created to promote the growth of museums, and activities such as the collection and preservation of artifacts such as paintings or sculptures had consequently become more organized. Even wealthy industrialists such as Henry Ford and Henry Mercer contributed their collections leading to the development of more privately run museums.**

## **Part B**

**A breeze of change was once again felt in the early 21st century. Museums were no longer anchored to the national ideal and today's new museums attract intellectuals as well as tourists and students. Attitudes toward museums have become more favorable as people no longer view them as boring, cold places that drag you to the past.**

**One of the main factors that have contributed to this is technology. Modern museums have embraced technology with considerable use of multimedia, digital displays, touch screens as well as other interactive technologies. Some museums, such as the Metropolitan Museum of Art in New York, use technology that allows visitors to see the objects, hear or read about the collection on their smartphones by scanning the artwork. Other national museums have also followed suit by embracing mobile interactivity. The Smithsonian Institution, which is the world's largest museum and research complex containing 19 museums and galleries, provides cell phone tours, interactive games like Pheon, which is a multimedia scavenger hunt game, multilingual slideshows, and even augmented reality apps such as one from the postal museum showing Owney, the mascot of the Railway Mail Service.**

**Additionally, there are some museums such as the National Museum of African Art that have the Artists in Dialogue 2 app, which allows for visual calls and responses that cut across physical and political borders. The app facilitates a guided tour of the museum with the curator virtually, and also allows the user to experiment with the artistic technique in a virtual art-development game. The user can**

even communicate with active groups of the museum on social media.

So far, technology has provided modern-day museums with the opportunity to share images and works of art with more people than ever before. However, the conclusion is that technology is enhancing and not replacing the brick and mortar museums since technology cannot replace a live experience for the viewer such as live interaction with the experts, emotional reactions, and the physicality of artworks.

#### Questions 1 - 5

Complete the summary below.

Write ONE WORD ONLY from Part A of the passage for each answer.

The earliest museums displayed personal 1 \_\_\_\_\_ belonging to rich people, and until the eighteenth century, only the elite class could visit these places. In the latter half of the century, the British Museum and the Uffizi Gallery opened their doors for the 2 \_\_\_\_\_, but not without restrictions. Finally, in 1793, the Louvre in Paris allowed access irrespective of class and 3 \_\_\_\_\_ and became a key factor in promoting nationalistic emotions. By the early twentieth century, museums had started gaining recognition as centers of knowledge. The 4 \_\_\_\_\_ had moved from history to art and science. During this century, with urbanization and more funds coming in, museums were modified to provide learning as well as 5 \_\_\_\_\_.

## **A Brief (and Tasty) History of Chocolate**

The first records that chronicle the manufacture and consumption of chocolate originate from about 200-950 A.D., during the Classic Period of Mayan culture. Glyphs and ancient Vessels provide the first evidence that the *Theobroma cacao* a tree that grows in the tropical rainforest - was harvested for its cacao seeds. The Mayan culture was spread over vast Mesoamerican territory, covering what is now southern Mexico, Belize, Guatemala, Honduras, and part of El Salvador.

Not only were cacao trees harvested in the wild, but Mayans also grew the trees near their homes, in their own backyard gardens. After the cacao pods were picked, the seeds found inside were fermented and dried. The seeds would then be roasted over a fire, followed by grinding between two large stones. The resulting paste was mixed with water, chilli peppers, cornmeal and other ingredients. This final concoction made the cacao paste into a spicy, frothy, and rather bitter drink. With sugar unknown to the Mayans, if chocolate were sweetened at all, the sweetener would have been honey or flower nectar.

The Mayan culture reached its zenith during the Classic period, followed by centuries of decline. By 1400, the Aztec empire dominated much of the Mesoamerican landscape. The Aztecs not only adopted the cacao seeds as a dietary staple but also as a form of currency. (Cacao seeds were used to pay for items, and also given as tribute by conquered peoples. While in the Mayan culture many people could drink chocolate, at least occasionally, in Aztec culture the chocolate was reserved mostly for royalty, priests, and upper



echelons of society. The priests would also present cacao seeds as offerings to the gods, serving chocolate drinks during sacred ceremonies, one reason for our calling chocolate the 'elixir of the gods'.

During the conquest of Mexico by the Spaniards in 1521, Europe became aware of chocolate for the first time. Spaniards had observed the Aztec royalty and priesthood making and drinking the dark concoction, and quickly came to like it as well. Cacao seeds were shipped back to Spain in bulk, where the paste was mixed with spices like cinnamon and sugar, thus taking the edge off their bitterness. An expensive import, only the Spanish elite could afford to purchase chocolate, and for the next 300 years, chocolate was treated as a status symbol. Spain continued to import and manufacture its chocolate in secret for at least a hundred years before the rest of Europe caught wind of the delicious brew. Once out, chocolate became one of the greatest fads to hit the continent.

Production of both cacao beans and sugar were labour-intensive and time-consuming processes. To keep up with demand for both items, many European countries set plantations in the New World for the cultivation of these two crops. Wage labourers and slaves were used to grow the crops, then process them, for export to and sale in Europe.

It was not until the 1800s that mechanisation speeded up the process of chocolate-making making chocolate cheaper, more plentiful, and thus available to the public at large. With the advent of the steam engine, cacao beans could be ground automatically. Bakers and confectioners seized the opportunity to work with this suddenly available

medium, establishing shops to the exclusive manufacture of chocolate, especially in countries like Belgium, Switzerland, Germany, and France. Lindt & Sprungli, of Switzerland, showed up in 1845, and Neuhaus Master Chocolate Makers, of Belgium, in 1857.

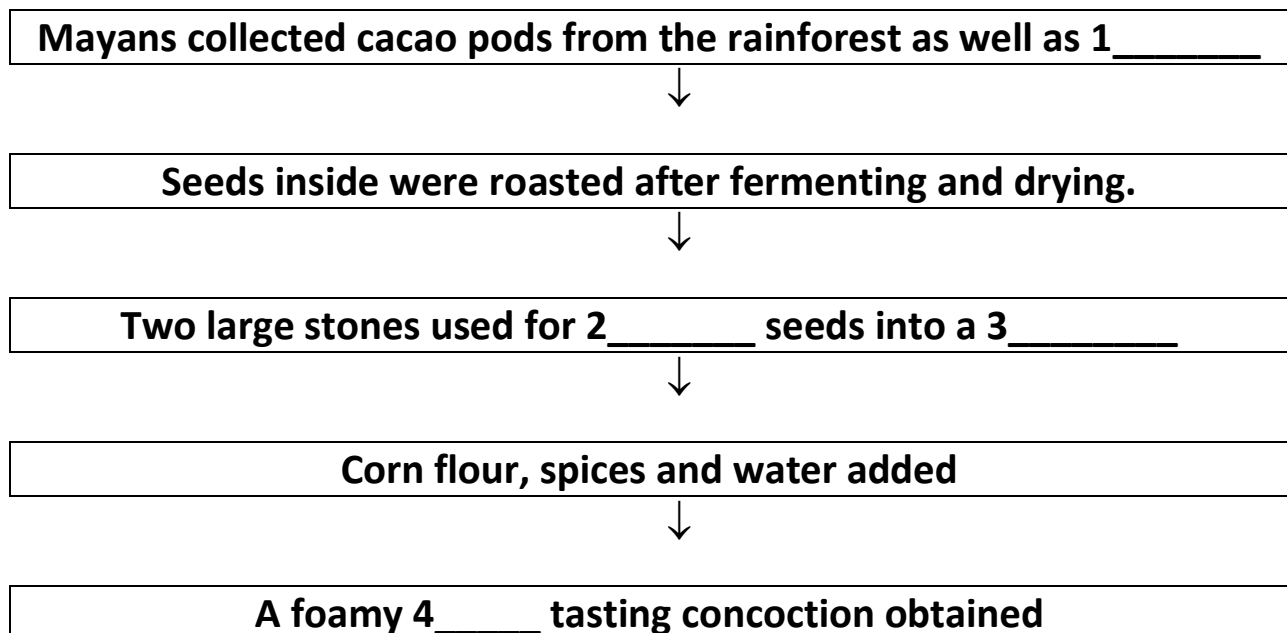
Different chocolate manufacturing processes were also invented along the way. One of the three biggest processes to change the way in which chocolate was made and consumed was the addition of milk, instead of water, to chocolate. This idea, credited to Sir Hans Sloane, further reduced cacao bitterness and improved taste. Sir Sloane kept his discovery trade secret for some time before selling the recipe to a London apothecary (which later on became the property of the Cadbury brothers). Condensed and powdered milk eventually replaced whole milk, allowing for a smoother and far sweeter product than before; milk chocolate is by far the most popular chocolate item in America today.

Another improvement in manufacturing came with the making of liquid chocolate into semi-solid edible bars, allowing the item to become much more portable and not as perishable (solid chocolate has a shelf-life of about a year). The secret to bar-making comes from cacao butter, the fatty part of the cacao bean. When the bean is ground up, about 55% of the resulting paste is cacao butter. This fat percentage, though seemingly high, is still too low to make soft (and edible) bar chocolate, yet way too high for powdered chocolate (such as is used to make hot chocolate). Heavy-duty presses are used to remove about half of the cacao butter from the paste, after which the purified butter is added into "untouched" raw paste, making bar chocolate that is about 75% cacao butter, and semi-solid at room temperature. The stripped paste, devoid of about half of its fat

content, solidifies into a hard cake that is pulverised into cacao powder.

A third, and major, improvement in chocolate manufacturing came with the discovery of the conching method - the mixing of chocolate over a period of several days in order to allow volatiles and moisture to evaporate, resulting in a more pleasing, smoother taste to the final product. Conching is credited to Rudolph Lindt (of Lindt & Sprungli fame), who found out that a batch of chocolate left mixing for several days became much smoother in texture and taste than allowed to solidify immediately.

Despite modern improvements to the processing of chocolate, the actual harvesting of the cacao bean has remained virtually unchanged since the days of the Mayans and Aztecs and is still cultivated in tropical climates, within 10 to 20 degrees of the Equator.



## Questions 25–30

What comment do the students make about each of the following jobs?

Choose **SIX** answers from the box and write the correct letter, **A–G**, next to Questions 25–30.

**Comments**

- A** These jobs are likely to be at risk.
- B** Their role has become more interesting in recent years.
- C** The number of people working in this sector has fallen dramatically.
- D** This job will require more qualifications.
- E** Higher disposable income has led to a huge increase in jobs.
- F** There is likely to be a significant rise in demand for this service.
- G** Both employment and productivity have risen.

**Jobs**

- 25 Accountants .....
- 26 Hairdressers .....
- 27 Administrative staff .....
- 28 Agricultural workers .....
- 29 Care workers .....
- 30 Bank clerks .....

Test 1

Questions 27–30

What opinion do the students give about each of the following modules on their veterinary science course?

Choose **FOUR** answers from the box and write the correct letter, **A–F**, next to questions 27–30.

**Opinions**

- A** Tim found this easier than expected.
- B** Tim thought this was not very clearly organised.
- C** Diana may do some further study on this.
- D** They both found the reading required for this was difficult.
- E** Tim was shocked at something he learned on this module.
- F** They were both surprised how little is known about some aspects of this.

**Modules on Veterinary Science course**

- 27** Medical terminology .....
- 28** Diet and nutrition .....
- 29** Animal disease .....
- 30** Wildlife medication .....

# Task - 1



The table below shows information about age, average income per person and population below poverty line in three states in the USA. Summarise the information by selecting and reporting the main features and make comparisons where relevant.

	California	Utah	Florida
Aged under 18	17%	28%	16%
Aged over 60	13%	8%	23%
Average income per person (\$)	23,000	17,000	22,000
Population below poverty line	16%	9%	12%