Ötzi the Iceman

Found in 1991 in the Ötztal Alps this well preserved mummy of a man has been affectionately nicknamed Ötzi the Iceman. He is Europe’s oldest natural human mummy and has been estimated to have lived around 3,300 BC.

When first found people thought this was the body of a recently deceased climber. It was only when Ötzi was taken to the University of Innsbruck that it was fairly quickly determined that this was an ancient mummy.

It was finally determined that Ötzi was about 45 years old when he died, weighed 50kg, and was 1.65 metres tall. It was even possible to tell which village he had lived in by the type of pollen and dust grains found on his body.

His diet from several months before he died was determined by hair analysis and shown to be a mixture of different meats, wheat bread, root vegetables, fruits, and other grains. Ötzi’s death most likely happened in the spring because of the presence of very fresh pollen that is only seen at this time of year.

High levels of copper and arsenic were also found in his hair suggesting that he might have been involved in making bronze (a mixture of copper, arsenic and/or tin). The copper axe found by his side was probably made by him.

Lines on one of the two fingernails found indicate that he had been ill three times in the last six months.

Ötzi had several tattoos on his body including a cross behind his right knee and various marks around both ankles. These might have been for decoration but it is thought that they are connected to pain relief treatments similar to acupuncture and acupressure.

He wore a cloak made of woven grass and a coat, a belt, a pair of leggings, a loincloth, and shoes, all made of leather of different skins. This was seen as very sophisticated for the time and suggests that Ötzi was a chief of his tribe. The shoes were waterproof and designed for walking across the snow. They were constructed using bearskin for the soles, deer hide for the top panels, and a netting made of tree bark.
Questions 1–7

Complete the summary below.

Choose NO MORE THAN TWO WORDS AND/OR A NUMBER from the passage for each answer.

Write your answers in boxes 1-7 on your answer sheet.

Originally thought to be a climber that had 1 _______ not long ago, Ötzi was then found to be an ancient mummy that had lived over 5,000 years ago. Scientists determined the location he had lived in because his body had a certain type of 2 _______ on it. Through 3 _______ we now know that he regularly ate a mixture of different foods including wheat bread and root vegetables. The season he died in was also worked out by the presence of 4 _______. Ötzi was not in the best of health and had in fact been ill 5 _______ not so long ago as shown by marks on his nails. Different tattoos on his body might have been used for 6 _______. He was a well dressed man with the type of clothes that suggested he was a tribal 7 _______.
Charles Macintosh

It is difficult to imagine in today’s world of high technology but in the 19th century it was impossible to find a waterproof coat. Whenever it rained you were sure to get wet from head to toe. This was all to change with a little help from Charles Macintosh a Scottish chemist and inventor.

Born in 1766, he was expected to spend his life working for his father in the family business dyeing wool and silk. Charles had other ideas, after leaving school, he studied chemistry at a university in Glasgow and after graduating was employed as a clerk with a merchant.

This was only a stepping-stone as Charles never gave up his love of science, particularly chemistry, and spent all of his free time studying. By the time he was twenty Charles had given up his job and had opened up his own company manufacturing various chemicals including ammonium chloride and Prussian blue dye.

This became a successful business for Charles but he was not the kind of man just to focus on one thing. He was constantly looking for better ways, and easier ways to do things and with the help of James Beaumont Nelson he developed a process to make high quality cast iron. This was an essential part of the industrial revolution that was happening in Britain at the time and was used to make machines, tools, bridges and ships.

After the death of his father, Charles inherited the family business and began to look for ways to invest his money. Around the same time, in 1817, the Glasgow Gas Light Company was established and Charles became interested in finding a use for the waste products from the coal gas industry. One of these was the waste product known as coal tar naptha. With a touch of genius that perhaps no one else at the time could have thought of Charles combined his knowledge of dyeing material with his love of chemistry.

The result was a liquid rubber that when combined with other textiles made them waterproof. The rainproof cloth was quickly adopted by the British army and navy. It was sold to the public as the world’s first raincoat – the Mackintosh. Note the added ‘k’ to Charles’s name.
Questions 8–14

Complete the sentences below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.

Write your answers in boxes 8-14 on your answer sheet.

8 .......................... was impossible to buy more than 200 years ago.
9 Macintosh went to university instead of working for the .......................... .
10 By the time he was .......................... he had started his own company.
11 Macintosh played a big part in the .......................... that was happening at the time.
12 Coal tar naptha was a .......................... from the coal gas industry.
13 After some research Macintosh was able to make .......................... waterproof.
14 The raincoat was finally ready when he added a .......................... .
SECTION 2  Questions 15–27

Read the text below and answer Questions 15–20.

The Treehouse

About the Treehouse

The Treehouse is built from Canadian cedar, Scandinavian redwood and English and Scots pine. It sits high in the treetops among a group of mature lime trees and looks as if it’s been there forever.

There are walkways in the sky and wobbly rope bridges, all accessible by wheelchair and buggy. At the heart of the Treehouse is one of the most beautiful and unique restaurants to be found anywhere in the world. There’s a roaring log fire in the center of the room, trees growing through the floor, and handcrafted furniture.

About the Treehouse Restaurant

Always featuring local fish and seafood, meats from Northumberland’s farmlands and other regional specialities, the Treehouse Restaurant menu highlights local quality, taste and changes throughout the seasons. There’s a great wine list, a good range of beers and regular live music.

For a family dining experience that you’ll all enjoy, a great night out with friends or a romantic dinner for two, there’s nowhere quite like it. We always recommend booking ahead for lunch or dinner.

About the Potting Shed

If you fancy a satisfying lunch, but don’t want a full restaurant meal, the Potting Shed is perfect for you. During the day you can grab a drink with some friends, a range of hot and cold delicious light lunch choices, and relax - and all as you take in the unique atmosphere. Choose from classics such as a bacon sandwich, chef’s soup of the day, or perhaps some irresistible sweet potato fries.

For a fantastic family lunch, why not eat outside on our Treehouse decking? Just order inside, eat outside - simple as that! Adults can relax to sunshine and birdsong, while kids can dash across rope bridges, run around and enjoy the enchanting walkways.

In the evening the Potting Shed really comes to life, and is open exclusively for our dinner guests to enjoy a pre-dinner drink before moving on to the Restaurant for their meal, or a leisurely nightcap to end the evening.
Questions 15 - 20

Look at the following statements and the different sections of the Treehouse below.

Match each statement with the correct section, A-C.

Write the correct letter, A-C, in boxes 15-20 on your answer sheet.

NB You may use any letter more than once.

15 Highlights the lunch time menu
16 It’s much better to make a reservation before you go
17 Discusses certain environmentally aspects of the building
18 Their menu focuses on local food
19 Disabled people have easy access
20 This is a great place for children to play

The Treehouse
A About the Treehouse
B About the Restaurant
C About the Potting Shed
English Gardens

The English landscape garden is a style of landscape garden which emerged in England in the early 18th century, and spread across Europe as the principal gardening style of Europe. The English garden was seen as a way to present an idealized view of nature and was influenced by gardens from the East and West.

The National Arboretum
Westonbirt really comes into its own when the trees show off their autumn colour. There are over 16,000 trees and 17 miles of paths at Westonbirt, which also looks its best in spring with displays of rhododendrons, azaleas and magnolias.

Hidcote Manor
This is an Arts & Crafts masterpiece hidden down a series of twisting country lanes in the Cotswolds. It was designed and developed by current owner Maj. Lawrence Johnston, a wealthy, well educated and eccentric American who fought with the British Army in the Boer and First World Wars. Johnston sponsored and participated in plant hunting expeditions around the world to secure rare and exotic species for this extremely pretty garden.

Stourhead
Found in Wiltshire, this is an outstanding example of an 18th century English landscaped garden – not so much rows of flower beds and herbaceous borders, as sweeping lawns, a picturesque lake and temples and a grotto. One of the temples was the location of a rain-soaked (and unsuccessful!) marriage proposal scene in the 2005 film Pride and Prejudice.

Hampton Court Palace
Visitors can get lost in the gardens surrounding Henry VIII’s famous palace – literally. There is a maze dating back to about 1700, commissioned by William III. Originally planted using hornbeam trees and later replanted using yew trees, the Hampton Court maze covers a third of an acre, is trapezoid in shape and is the UK’s oldest surviving hedge maze.

Sissinghurst Castle Gardens
Visited by Queen Elizabeth in the 16th century, this is one of the most celebrated gardens in the world. Set in the ruins of an Elizabethan house, it offers spectacular views on all sides across the fields and meadows of the Kentish landscape. Close by is the aromatic garden built around a slender brick-built castle tower.
Questions 21 - 27

Do the following statements agree with the information given in the reading passage?

In boxes 21-27 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

21 The English landscaped garden started in England in the 1800s.
22 Westonbirt is really worth seeing in at least two different seasons.
23 It might be difficult to find Hidcote Manor.
24 The owner of Hidcote manor is quite young.
25 The gardens in Stourhead were first established to film Pride and Prejudice.
26 Henry VIII used to spend a lot of time at Hampton Court Palace.
27 The Elizabethan house in Sissinghurst Castle Gardens has now been rebuilt.
Coffee

It is not really known when the very first cup of coffee was drunk but there are written records from the 10th century that mention two Arabian philosophers who drank a dark, bitter beverage. At the time it was called bunchum.

Before that it seems that the effects of coffee were well known to warriors in Ethiopia as far back as the 6th century. They would grind the coffee beans into a powder and then mix it with ghee, a kind of clarified butter, and eat it before going into battle. It is generally thought that coffee originates from the forested highlands of Ethiopia and then spread to North Africa, Arabia, and Turkey.

The favorite bedtime story about the origin of coffee goes like this: Once upon a time in the land of Arabia there lived a goat herder named Kaldi. One night, Kaldi's goats failed to come home, and in the morning he found them dancing with abandoned glee near a shiny, dark-leafed shrub with red berries. Kaldi soon determined that it was the red berries that caused the goats' eccentric behavior, and soon he was dancing too. Finally, a learned imam saw the goats dancing, Kaldi dancing, and the shiny, dark-leafed shrub with the red berries. The learned imam subjected the red berries to various experiments, one of which involved boiling them in water. Soon, neither the imam nor his fellows fell asleep at prayers, and the use of coffee spread from monastery to monastery, throughout Arabia and from there to the rest of the world.

The coffeehouse culture really took off in these areas in the 16th century and became so important that in Turkey not giving your wife enough coffee to drink was seen as a good reason for divorce. Around this time coffee began to spread around the world but to maintain a monopoly all exported coffee beans had to be boiled or partially roasted to prevent other counties from growing them.

However, in the 17th century an Indian pilgrim – a Sufi – called Baba Budan managed to smuggle a few coffee beans out of Arabia and into India. He then established a coffee plantation in the Mysore region of India that still exists today. As of 2009, India produced only 4.5% of the world’s coffee but this translates into 8,200 tons of coffee beans per year and an industry that supports more than 250,000 coffee growers.

Although the first coffee house opened in Venice in 1683, coffee had been available since 1608 but was seen as a luxury by all but the very rich. Coffeehouses quickly established a reputation as the place to be seen and a popular meeting place for political debate. The French revolutionists discussed the fate of the bourgeoisie in coffeehouses and if it were not for coffee the founding fathers of the United States of America may never have formed their national policies as they too met in coffeehouses.
In seventeenth-century England, coffeehouses were often called penny universities where, for the price of three pennies (entry and a cup of coffee), you could mix with famous scholars and participate in lively discussions. Later, in the eighteenth and nineteenth centuries, European and American intellectuals spent more time in coffeehouses than they did at home.

When you compare a typical 16th century breakfast in England of beer and herring with coffee, eggs and bread in the 19th century one might be forgiven for thinking that it must have been coffee that fuelled the start of the industrial revolution.

The coffee bean is in fact a seed and comes from a small red (sometimes yellow) fruit that grows on plants halfway in size between a shrub and a tree. The fruit most commonly contains two stones with their flat sides together. A small percentage, about 10%-15% contain a single seed, and this is called a peaberry. Many people believe that they have more flavor than the more common two stone variety.

The two most economically important varieties of coffee plant in the world are the Arabica and the Robusta; 75-80% of the coffee produced worldwide is Arabica and 20% is Robusta. Arabica seeds consist of 0.8-1.4% caffeine and Robusta seeds consist of 1.7-4% caffeine. As coffee is one of the world's most widely consumed beverages, coffee seeds are a major cash crop, and an important export product, counting for over 50% of some developing nations' foreign exchange earnings. The United States imports more coffee than any other nation. The average per capita consumption of coffee in the United States in 2011 was 4.24 kg and the value of coffee imported exceeded $8 billion.

The process that turns these seeds into a beverage is a long and complex process, perhaps the most complex process associated with any major beverage. It starts with the coffee grower, moves to the picker, then to the mill workers who remove the fruit and dry the seeds, then to those who clean and grade the beans, to those who roast them, to the consumers and baristas who finally grind the beans and prepare the beverage.

Every act along the way affects the final taste. Each part of the process can be performed either with passion or with carelessness. The final cup of coffee can, therefore, end up tasting like ditch water or be like nectar that raises your senses to an almost spiritual level of awareness.
Questions 28 - 31

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 28-31 on your answer sheet.

28 How did Arabia maintain their monopoly of coffee?
   A They never exported the beans
   B They boiled the beans
   C They only sold coffee powder
   D They roasted the beans

29 Why was coffee slow to spread through Europe when first introduced?
   A It was seen as an expensive luxury
   B Political reasons
   C There were no coffeehouses
   D It had a bad reputation

30 What were coffeehouses in England also known as?
   A home
   B places for intellectuals
   C cheap places to go
   D penny universities

31 What was a typical breakfast in England in the 16th century?
   A herrings, beer, and coffee
   B beer, bread, and eggs
   C herrings and beer
   D eggs, beer, and herrings

Questions 32 - 35

Complete the summary below.

Choose NO MORE THAN TWO WORDS AND/OR A NUMBER from the passage for each answer.

Write your answers in boxes 32-35 on your answer sheet.

Of the two main varieties of coffee plant, more 32 __________ coffee is produced around the world than 33 __________ but the latter has more 34 __________ at 35 __________.
Questions 36 - 40

Answer the questions below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 36-40 on your answer sheet.

36 What did Ethiopian warriors mix coffee powder with before going into battle?
37 According to a famous story, who realised coffee can keep you awake when praying?
38 How many coffee beans did Baba Budan smuggle into India?
39 What type of coffee bean is said to be the most flavourful?
40 If you don’t treat coffee properly what can it end up tasting like?