Girls and STEM

Women represent half of the UK workforce, yet only 22 per cent of people working in STEM (science, technology, engineering and maths) jobs in the UK are female. But things are starting to change. WISE (Women in Science and Engineering), which campaigns for gender and balance in STEM roles, has set a goal of one million women working in core STEM jobs by 2020. As Helen Wollaston says: “We simply have to get better at showing girls that maths, science and technology open doors to exciting, well-paid jobs where they can make a real difference to the world.”

Schools are doing their bit too, encouraging girls to study STEM subjects and showcasing the exciting opportunities in the workplace. A survey by software company Exasol in 2018 showed that the percentage of female students taking STEM subjects at A level had increased from 6.5 per cent to 11.8 per cent in the last five years. Lowena Hull, a pupil at Portsmouth High School, recently won £7,500 in a UK Space Agency competition for her idea to use satellites to track down lost supermarket trolleys. A team from James Allen’s Girls’ School also reached the final of this year’s TeenTech Awards with an app that helps you find your theatre or cinema seat in the dark.

At the university level, Brighton College engages girls in STEM subjects by inviting women scientists to speak as part of its careers programme. It also holds a Women in Science event solely for year 11 girls. Meanwhile, an allgirls team at Epsom College recently came third in the International Youth Rocketry Challenge. As Chris Telfer-Mason, head of physics, explains: “We have removed stereotyping by promoting STEM to both genders and encouraging students to work together in mixed teams, with job roles allocated based on an individual’s ability and skill.”


QUESTIONS

A.1 (2 puntos) Are the following statements TRUE or FALSE? Copy the evidence from the text. No marks are given for only TRUE or FALSE.

a) According to WISE, in 2020 there will already be one million women working in core STEM jobs. TRUE “WISE (Women in Science and Engineering), which campaigns for gender and balance in STEM roles, has set a goal of one million women working in core STEM jobs by 2020”

b) At Brighton College, scientists of both genders are giving talks to persuade girls to undertake STEM subjects. FALSE “At the university level, Brighton College engages girls in STEM subjects by inviting women scientists to speak as part of its careers programme”

A.2 (2 puntos) In your own words and based on the ideas in the text, answer the following questions. Do not copy from the text.

a) Explain both prize-winning school projects mentioned in the text. ONE OF THEM HELPS PEOPLE TO FIND THEIR SEAT IN THE THEATRES OR CINEMAS WHEN THE LIGHT IS OFF, THE OTHER ONE LOOKS FOR THE SUPERMARKET CARRIERS THAT ARE LOST
b) According to Chris Telfer-Mason, how do they avoid stereotyping? TRYING TO MAKE MEN AND WOMEN WORKING TOGETHER WITHOUT DIFFERENCES AND TAKING ONLY INTO ACCOUNT THE SUBJECT’S TALENT

A.3 (1 punto) Find the words in the text that mean:

a) presenting (paragraph 2) SHOWCASING
b) contest (paragraph 2) CHALLENGE
c) only (paragraph 3) SOLELY
d) assigned (paragraph 3) Allocated

A.4 (2 puntos) Complete the following sentences. Use the appropriate form of the word in brackets when given.

a) No matter ___ HOW ___ hard I’ve tried: I’ve never been good ___ AT ___ science.

b) This academic programme ___ WAS ESTABLISHED ___ (establish) two years ago by a non-profit organization ___ WHICH ___ intends to promote equal opportunities for students from developing countries.

c) ___ DESPITE ___ the efforts the school made to encourage girls to study STEM subjects, only six will finally apply ___ FOR ___ a science degree next May.

d) Complete the following sentence to report what was said.

“Why don’t you take a gap year to think about what you really want to study?” The Head of 6th Form asked me ___ WHY ___ I DIDN’T TAKE A GAP YEAR TO THINK ABOUT WHAT I REALLY WANTED TO STUDY ___.

A.5 (3 puntos) Write about 150 to 200 words on the following topic.

What was your experience with subjects at Bachillerato? Which ones did you enjoy and which ones would you change?

SINCE I HAVE ALWAYS LOVED ENGLISH I SUPPOSE THAT THIS IS MAYBE THE SUBJECT THAT I HAVE ENJOYED MOST, ON THE OTHER HAND, HISTORY, WHICH IS ALSO ONE OF MY FAVOURITE SUBJECT, HAS BEEN A BIT DISSAPPOINTING.

FIRST OF ALL, ENGLISH IS ESSENTIAL, YOU FIND THAT YOU WILL USE IT IN THE FUTURE SO YOU DON’T HAVE TO ASK YOURSELF IF YOU ARE LOSING YOUR TIME OR EFFORT, IT IS A PRACTICAL SUBJECT, YOU DON’T HAVE TO STUDY A LOT, YOU JUST HAVE TO PRACTISE. MAYBE YOU WILL HAVE TO REVIEW SOME WORDS OR THE IRREGULAR VERBS LIST BUT YOU DON’T HAVE TO SPEND LONG HOURS PREPARING THIS SUBJECT.

AS I SAID BEFORE, ON THE OTHER HAND, WE HAVE TO LEARN HISTORY, A VERY THEORETICAL SUBJECT WHICH REQUIRES A LOT OF YOUR TIME AND ATTENTION, IT IS REALLY INTERESTING, BUT DUE TO THE FACT THAT THE COURSE IS SHORT AND THERE ARE A LOT OF LESSONS, WE JUST HAVE TIME TO LEARN BY HEART A LOT OF NAMES AND DATES, WITHOUT UNDERSTANDING THE SITUATIONS OR WITHOUT ENJOYING EACH LESSON, WE ARE ALWAYS IN A RUSH.

FOR THIS REASON, I THINK WE SHOULD ENCOURAGE LEARNING AND PRACTISING INSTEAD OF MEMORIZING.
TEXT B

The Origins of Friday 13th

Friday the 13th always seems to spook many of us slightly, even if we claim not to be superstitious. But why does this day have such a supernatural vibe and why is there so much superstition around it?

References to Friday the 13th date back to medieval times but some believe that it was inspired by the Bible. At the Last Supper, Judas Iscariot, who went on to betray Jesus to the Romans, was the 13th person at the table, potentially inspiring fear of the number 13. Jesus was also said to have died on a Friday – also known as Good Friday – which has potentially resulted in Christians carrying the superstition from there.

Moving through to the Middle Ages, references to Friday being an unlucky day in general appear as early as the 14th century. The Canterbury Tales writer, Geoffrey Chaucer wrote: “On a Friday fell all this mischance”. Then there are the Knights Templar. The Catholic military order was arrested on Friday the 13th in October 1307 by order of King Philip IV. The Grand Master Jacques de Molay and scores of other French Templars were charged with numerous offenses such as financial corruption, fraud and secrecy, and were also accused of idolatry. These prisoners were tortured and burned at the stake later on.

Rossini, the Italian composer, died on Friday 13th according to Henry Sutherland Edwards’ 1869 biography. So it’s not surprising that some link bad luck to Friday the 13th. However, today Italians actually consider 13 to be a lucky number and Friday 17th to be an unlucky day.

Also known as triskaidekaphobia, the fear of the number 13 has also created traditions such as builders skipping the 13th floor when designing buildings, in an effort to avoid bad luck.

Adapted from “Friday the 13th: superstition origins and why the day is considered unlucky,” Newsweek, 13 September 2019. <https://bit.ly/2Sj4X8r>

QUESTIONS

B.1 (2 puntos) Are the following statements TRUE or FALSE? Copy the evidence from the text. No marks are given for only TRUE or FALSE.

a) Some people think that fear of Friday the 13th was motivated by biblical accounts. TRUE “References to Friday the 13th date back to medieval times but some believe that it was inspired by the Bible”

b) All Europeans consider 13 to be a lucky number. FALSE “However, today Italians actually consider 13 to be a lucky number and Friday 17th to be an unlucky day”

B.2 (2 puntos) In your own words and based on the ideas in the text, answer the following questions. Do not copy from the text.

a) What is the relationship between the Knights Templar and Friday the 13th? BECAUSE THEY WERE CAUGHT BY A KING ON THAT DAY ACCUSED OF MANY DIFFERENT CRIMES

b) What superstition is described in the text in relation to building design? SOME ARCHITECTS DECIDE NOT TO MAKE THE 13TH FLOOR BECAUSE THEY THINK THEY WILL KEEP BAD LUCK AWAY.

B.3 (1 punto) Find the words in the text that mean:
a) feel (paragraph 1) VIBE
b) on the whole (paragraph 3) IN GENERAL
c) relate (paragraph 4) LINK
d) attempt (paragraph 5) EFFORT

B.4 (2 puntos) Complete the following sentences. Use the appropriate form of the word in brackets when given.

a) It is often ___SAID_____ (say) that breaking a mirror results ___IN___ seven years of bad luck.

b) Rossini, ___WHOSE_____ death occurred ___ON___ 13th November 1869, was a famous Italian opera composer.

c) I ___WOULDN’T HAVE BOUGHT____ (not/buy) a black cat if I ___WERE/HAD BEEN____ (be) superstitious. In fact, I love my black cat!

d) Complete the following sentence to report what was said.

“Do you believe in destiny?”

Emma asked her boyfriend ___IF HE BELIEVED IN DESTINY___.

B.5 (3 puntos) Write about 150 to 200 words on the following topic. Do you believe in superstitions? Justify your answer.

THIS IS A VERY CONTROVERSIAL ISSUE, MANY PEOPLE HAVE DIFFERENT OPINIONS ABOUT SUPERSTITIONS AND ALL POINTS OF VIEW MUST BE RESPECTED, FROM MY PERSONAL POINT OF VIEW SUPERSTITIONS ARE NOT LOGICAL BUT, AT THE SAME TIME, I FEEL A BIT SCARED IN SOME SITUATIONS.

FIRST OF ALL, TRYING TO BE RATIONAL, IF YOU SEE A BLACK CAT OR YOU WALK UNDER A LADDER THE DAY OF AN IMPORTANT EXAM, IT WON’T AFFECT TO YOUR RESULTS, ESPECIALLY IF YOU HAVE STUDIED A LOT. WHAT CAN BE WRONG?

IN ADDITION TO THIS, WEARING YELLOW CLOTHES OR BUYING LOTTERY WHICH NUMBER STARTS OR ENDS IN 13 WON’T RUIN YOUR POSSIBILITIES OF WINNING, DUE TO THE FACT THAT IN THE SPANISH LOTTERY, ALL NUMBERS PARTICIPATE SO THE CHANCES OF WINNING OR LOSING ARE THE SAME.

HOWEVER, WHEN YOU FEEL BAD OR SAD OR INSECURE, ANY THING CAN AFFECT YOUR MOOD AND YOUR SELF STEEM, SO THESE SUPERSTITIONS CAN MAKE YOU FEEL EVEN WORS OR MORE ANXIOUS AND YOU CAN MAKE MISTAKES IN YOUR EXAM, YOUR INTERVIEW...

SO I THINK THAT THEY AFFECT UP TO A POINT, DEPENDING ON HOW YOU FEEL OR WHAT YOUR MOOD IS THAT DAY.