

**UZUPEŁNIA ZDAJĄCY**

<b>KOD</b>	<b>PESEL</b>
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>

*miejsce  
na naklejkę*

**EGZAMIN MATURALNY  
Z JĘZYKA ANGIELSKIEGO  
POZIOM ROZSZERZONY**

DATA: **8 maja 2019 r.**  
GODZINA ROZPOCZĘCIA: **14:00**  
CZAS PRACY: **150 minut**  
LICZBA PUNKTÓW DO UZYSKANIA: **50**

**UZUPEŁNIA ZESPÓŁ  
NADZORUJĄCY**

Uprawnienia zdającego do:

- |                          |                                       |
|--------------------------|---------------------------------------|
| <input type="checkbox"/> | dostosowania<br>kryteriów oceniania   |
| <input type="checkbox"/> | nieprzenoszenia<br>zaznaczeń na kartę |

**NOWA FORMUŁA**

**Instrukcja dla zdającego**

1. Sprawdź, czy arkusz egzaminacyjny zawiera 15 stron (zadania 1–10). Ewentualny brak zgłoś przewodniczącemu zespołu nadzorującego egzamin.
2. Teksty do zadań od 1. do 3. zostaną odtworzone z płyty CD.
3. Pisz czytelnie. Używaj długopisu/pióra tylko z czarnym tuszem/atramentem.
4. Nie używaj korektora, a błędne zapisy wyraźnie przekreśl.
5. Pamiętaj, że zapisy w brudnopisie nie będą oceniane.
6. Na tej stronie oraz na karcie odpowiedzi wpisz swój numer PESEL i przyklej naklejkę z kodem.
7. Zaznaczając odpowiedzi w części karty przeznaczonej dla zdającego, zamaluj  pola do tego przeznaczone. Błędne zaznaczenie otocz kółkiem  i zaznacz właściwe.
8. Tylko odpowiedzi zaznaczone na karcie będą oceniane.
9. Nie wpisuj żadnych znaków w części przeznaczonej dla egzaminatora.



MJA-R1\_1P-192

### Zadanie 1. (0–3)

Usłyszysz dwukrotnie trzy teksty. Z podanych odpowiedzi wybierz właściwą, zgodną z treścią nagrania. Zakreśl jedną z liter: A, B albo C.

#### Tekst 1.

##### 1.1. What is the speaker doing?

- A. encouraging people to take part in a rafting race
- B. announcing a contest for a group of workers
- C. advertising a holiday for adventure-seeking tourists

#### Tekst 2.

##### 1.2. The text is about

- A. a natural disaster which has threatened the survival of snow leopards.
- B. activities undertaken to protect wildlife in the Himalayas.
- C. factors contributing to the possible extinction of a species.

#### Tekst 3.

##### 1.3. Which of the following is stated in the conversation as a **fact**, not an opinion?

- A. Fifty percent of small businesses fail during the first year.
- B. A specialist has a better chance of running a successful business.
- C. Few people do research before starting a business.

### Zadanie 2. (0–4)

Usłyszysz dwukrotnie cztery wypowiedzi na temat pozbywania się z domu niepotrzebnych rzeczy. Do każdej wypowiedzi (2.1.–2.4.) dopasuj odpowiadające jej zdanie (A–E). Wpisz rozwiązania do tabeli.

**Uwaga:** jedno zdanie zostało podane dodatkowo i nie pasuje do żadnej wypowiedzi.

#### This speaker mentions

- A. a common mistake made while decluttering.
- B. the amount of time it took to declutter his/her house.
- C. the support he/she received while decluttering.
- D. the reasons why some houses or flats remain cluttered.
- E. the psychological consequences of leaving your house cluttered.

2.1.	2.2.	2.3.	2.4.

**Zadanie 3. (0–5)**

Usłyszysz dwukrotnie wywiad z wynalazcą. Z podanych odpowiedzi wybierz właściwą, zgodną z treścią nagrania. Zakreśl jedną z liter: A, B, C albo D.

**3.1. The purpose of Trevor's invention was to**

- A. put his old gramophone to a new use.
- B. store electricity in remote areas of Africa.
- C. create an affordable way of powering radios.
- D. produce a radio that would also function as a gramophone.

**3.2. Why don't some people make use of their potential, according to Trevor?**

- A. They don't come up with ideas quickly enough.
- B. They underestimate the value of their ideas.
- C. Their minds are not trained to generate new ideas.
- D. They feel intimidated because of fierce competition on the market.

**3.3. Which is NOT mentioned by Trevor as something teenagers should learn?**

- A. dealing with electrical faults
- B. doing some woodwork
- C. growing plants in the garden
- D. carrying out car repairs

**3.4. When asked about information technology as a tool for inventors, Trevor**

- A. suggests not being too dependent on it.
- B. argues it should be given priority over other tools.
- C. questions the accuracy of computer-aided designs.
- D. emphasizes the reliability of electronic devices.

**3.5. Which sentence best reflects Trevor's opinion on female inventors?**

- A. They mostly came up with inventions for the home.
- B. They were reluctant to take up educational opportunities.
- C. They proved to be better inventors than men.
- D. They were not adequately acknowledged as inventors.

**PRZENIEŚ ROZWIĄZANIA ZADAŃ OD 1. DO 3. NA KARTĘ ODPOWIEDZI!**

#### Zadanie 4. (0–4)

Przeczytaj tekst, który został podzielony na trzy części (A–C), oraz pytania go dotyczące (4.1.–4.4.). Do każdego pytania dopasuj właściwą część tekstu. Wpisz rozwiązania do tabeli.

Uwaga: jedna część tekstu pasuje do dwóch pytań.

In which paragraph does the author mention

4.1.	mockery directed at Lincoln for questioning a popular view?	
4.2.	a venue which inspired the name of an event?	
4.3.	a procedure to ensure the high quality of texts on Shakespeare's work?	
4.4.	comfort brought by the appreciation of Shakespeare's plays?	

#### LINCOLN'S LOVE OF SHAKESPEARE

- A. When asked about Abraham Lincoln, the 16<sup>th</sup> American president, most people think about his assassination or his role in the Civil War and the abolition of slavery. Fewer people know about the tragedies in his private life or his love of Shakespeare. This was one of the topics at the prestigious *Wooden O Symposium* hosted by Southern Utah University, where scholars annually present their scientific work on Shakespeare. The term *Wooden O* is a direct reference to Shakespeare's theatre, *The Globe*, which was a round wooden structure. Most of the content presented at the conference, attracting participants not only from the US, is devoted to the playwright.
- B. One of the speakers showed that Lincoln's lifelong admiration for Shakespeare helped him cope with the strain of the turbulent years of his presidency and gave him consolation after his son passed away. The president memorized many lines from Shakespeare's works, was a keen theatregoer and became acquainted with actors, for example James Hackett, who appeared in a production of *Henry IV*. Lincoln's letter to Hackett testifies to his love of Shakespeare. In the letter, he challenged the standing of the highly acclaimed Hamlet monologue *To be or not to be*, arguing it was surpassed by *O, my offence is rank* delivered by Claudius. Hackett was indiscreet and had the letter printed, thus exposing Lincoln to public ridicule because of his literary judgement.
- C. This story about Lincoln, alongside other titbits and serious scholarly findings, can be found in the *Journal of the Wooden O*, an annual publication featuring articles on Shakespeare and containing selected research papers from the symposium at Southern Utah University. Submitted articles must be peer-reviewed. Sometimes they also undergo a second review process. This approach means that the publication is a valuable source of accurate information for both scholars and non-academics who derive great pleasure from the playwright's dramas.

adapted from <https://theamericanscholar.org>; <http://www.bard.org>

**PRZENIEŚ ROZWIĄZANIA NA KARTĘ ODPOWIEDZI!**

### Zadanie 5. (0–4)

Przeczytaj tekst, z którego usunięto cztery fragmenty. Wpisz w każdą lukę (5.1.–5.4.) literę, którą oznaczono brakujący fragment (A–E), tak aby otrzymać spójny i logiczny tekst.

**Uwaga:** jeden fragment został podany dodatkowo i nie pasuje do żadnej luki.

#### HUGH LANE PAINTING ROBBERY

Hugh Lane, a successful Irish art dealer, decided that after his death his collection of paintings would belong to Ireland. After some time, he changed his mind and left everything to London's prestigious *Tate Gallery* instead. However, shortly before he died in 1915, he made yet another will which indicated that a gallery in Dublin should own his collection. As nobody had witnessed the signing of the last will, the English court refused to recognize it as a legal document, and the paintings remained in England. **5.1.** \_\_\_\_\_ Yet, it was all in vain.

In 1956, two Irish citizens decided to do something about it. On April 12<sup>th</sup>, they stole an Impressionist painting, *Summer's Day*, from the Hugh Lane collection in the *Tate Gallery*.

**5.2.** \_\_\_\_\_ The former was a frequent visitor to the gallery, so he was a familiar figure. While he pretended to be making a copy of the painting on a sketchpad, his accomplice lifted it off the wall and put it inside a large portfolio they had brought with them. Next, they left the gallery using the front door. The whole point of the robbery was to get publicity for the cause. They even arranged for a press photographer to be on the spot and take a photo of them leaving the gallery. As a result of their ingenious scheme, the photo and the news of the robbery made the headlines the following day. **5.3.** \_\_\_\_\_ The entire plan proved effective. Three years later, an agreement was reached between Ireland and the UK that the collection would be shared between the two countries, and in 1999, over 30 paintings returned to Dublin for good.

The theft of the painting from the *Tate Gallery* was worrying for art lovers because it showed that there was a complete lack of security in a place where many masterpieces were kept.

**5.4.** \_\_\_\_\_ Fortunately, this did not happen.

*adapted from www.telegraph.co.uk*

- A. To make the authorities start negotiations, after a few days *Summer's Day* was anonymously delivered to the Irish embassy.
- B. The British were also concerned that the publicity given to the case would lead to the students being perceived as heroes fighting for the Irish cause, which could strain British–Irish relations.
- C. The ease with which the culprits committed this deed is still shocking. The thieves were Paul Hogan, who was studying at the Dublin College of Art, and Bill Fogarty, a veterinary student.
- D. It proves that the caretaker on duty could have prevented the robbery, but he was outsmarted.
- E. In the following decades, the Irish arts community and government made numerous attempts to claim the canvases back.

**PRZENIEŚ ROZWIĄZANIA NA KARTĘ ODPOWIEDZI!**

### Zadanie 6. (0–5)

Przeczytaj dwa teksty na temat wspinania się. Z podanych odpowiedzi wybierz właściwą, zgodną z treścią tekstu. Zakreśl jedną z liter: A, B, C albo D.

#### Tekst 1.

##### A TEMPTING OFFER

In March of 1995, I received a call from Mark Bryant, the editor of *Outside*. He proposed that I join a guided Everest expedition scheduled to depart soon and write an article about the growing commercialization of the mountain. The magazine's idea was that I remain in Base Camp and report the story from the glacier at the foot of the Tibetan side of the mountain. Mark insisted that I make the decision at once, so I said "yes" and went as far as to book a flight and get the required immunizations. But then, after I'd thought it through, I backed out at the last minute. Given the aversion to Everest I'd expressed over the years, one might assume that I declined to go on principle, but I did it for a different reason. As a child, I often imagined myself conquering the mountain, so the call from *Outside* had unexpectedly aroused a powerful, long-buried desire. I realized it would be unbearably frustrating to spend two months in the shadow of Everest without ascending higher than Base Camp. If I were going to travel to the far side of the globe and spend eight weeks away from my wife and children, I wanted an opportunity to climb the mountain.

A few days later, I thought of a possible alternative. I contacted the editor and asked if he would consider postponing the assignment for a year and changing it so that I got the chance to reach the summit. The immunizations would still be valid and a twelve-month delay would give me time to train intensively to meet the physical demands of the expedition. The biggest question was if the magazine would be willing to book me with one of the more reputable guide services and cover the \$65,000 fee. I'd written more than sixty pieces for *Outside* over the previous fifteen years, but the travel budget for these assignments had never exceeded two or three thousand dollars.

Bryant called back a day later. He said that the magazine didn't usually spend such high sums on any expedition, but he thought the story about the commercialization of Everest was worth it, and if I was serious about trying to climb to the top, *Outside* would figure out a way to make it happen.

*adapted from Into Thin Air by Jon Krakauer*

**6.1. The author rejected the magazine's original offer because of**

- A. the prospect of being separated from his family.
- B. the limited time to book an appropriate flight.
- C. his greater ambitions concerning Everest.
- D. his negative attitude to Everest.

**6.2. The author realized the alternative assignment would mean**

- A. improving his fitness.
- B. repeating the immunizations.
- C. limiting his budget for guide services.
- D. looking for other sponsors.

**6.3. In the text, the author**

- A. gives an account of his preparations for an assignment that the editor cancelled.
- B. describes how he found a way to make his dream come true.
- C. explains how he was tricked into joining a climbing expedition.
- D. presents the challenges of reaching Everest Base Camp.

## Tekst 2.

### TREE CLIMBING

It had been nearly 40 years since I climbed a tree, and to be honest it was not something I'd expected to do again. But earlier this summer, I found myself on the Isle of Wight, putting on a safety helmet and harness and preparing to scale a 70ft oak tree, using only ropes and my own strength.

For grown-ups, tree climbing is not only a chance to relive childhood adventures while flexing some underused muscles again, it can also give your brain a big boost. Research published at the University of North Florida revealed that tree climbing can benefit our working memory. This is the part of our memory we rely on to follow instructions or directions and to remember phone numbers or items on a shopping list. The researchers discovered that when you climb a tree, your brain is constantly calculating and evaluating your spatial awareness, balance and orientation. This provides it with a vigorous workout. Quite simply, after such a challenging physical activity, your brain becomes extremely alert and ready for mental tasks.

With this information firmly in mind, my wife and I, along with our sons, decided to see whether tree climbing would work that well in our case. We headed to the Isle of Wight, where Paul McCathie, an experienced tree surgeon, runs a tree climbing business. Here anyone over the age of eight can learn to climb safely.

Before we started, any fears we had about tree climbing – everything from branches giving way to suffering vertigo – were calmly talked through by Paul. He had us trained before we set off and managed to pacify all our worries. Think the rope's going to snap, for instance? Don't worry. Each one could bear the weight of a two-ton rhino. Paul explained we would be secured to the rope via a carabiner, a metal loop attached to a waist harness. Surprisingly, I felt totally secure in the harness. He also assured us that we could come down at any time.

When our two hours were up, we were exhausted but didn't feel like returning to ground level. When we started climbing, I had the sensation of everything spinning around, but in the end I was surprised to find the experience really calming. We all agreed it was one of the most challenging and thrilling family activities we had done together.

Did it work? Did I feel more alert after my brain workout? I did my weekly supermarket shopping that evening and I didn't forget any of the items I was supposed to buy. It's not proof but the scientists might be right.

*adapted from www.express.co.uk*

#### 6.4. The main reason for the author's visit to the Isle of Wight was to

- A. overcome his fear of heights.
- B. make an attempt at an activity completely new to him.
- C. relive thrilling childhood adventures.
- D. test the findings of an academic study.

#### 6.5. Which is TRUE about the family's experience of tree climbing?

- A. They had to go down before their time was up.
- B. Not everyone in the family enjoyed the activity.
- C. The instructor's explanations soothed their anxiety.
- D. While training, they all had to slide down the rope to test the harness.

**PRZENIEŚ ROZWIĄZANIA NA KARTĘ ODPOWIEDZI!**

**Zadanie 7. (0–4)**

Przeczytaj tekst. Z podanych odpowiedzi wybierz właściwą, tak aby otrzymać logiczny i gramatycznie poprawny tekst. Zakreśl jedną z liter: A, B, C albo D.

**GOLD HIDDEN INSIDE A PIANO**

After a community group in Shropshire, England, decided to have a donated piano tuned, the tuner made an incredible discovery. Inside the piano, first sold in 1906, there was a hidden pile of gold. The group immediately 7.1. \_\_\_\_\_ the find to the authorities, and the gold was taken to the British Museum. The authorities aren't willing to give out details about the weight and purity of the gold, but it's believed to be highly valuable.

A British Museum specialist, Peter Reavill, was surprised at the discovery. "They laid this stuff out and I was really impressed. I'm an archaeologist and I'm used 7.2. \_\_\_\_\_ with treasure but I'm more accustomed to medieval brooches," Mr. Reavill told reporters.

The United Kingdom actually has a law concerning such discoveries. For a precious find to be officially declared a treasure, "it must be made of gold or silver and must have been deliberately concealed by the owner with a view to later recovery." 7.3. \_\_\_\_\_ the original owner is found, the treasure goes to the Crown. The museum would then be able to buy it, and the tuner and the piano owners would get a reward – a finder's fee. The authorities are still trying to trace the piano's history and find the original owners. If they do, perhaps we'll discover the story behind this pile of gold – and why it was hidden in the first 7.4. \_\_\_\_\_.

*adapted from www.atlasobscura.com*

7.1.

- A. conveyed
- B. reported
- C. notified
- D. informed

7.2.

- A. deal
- B. to deal
- C. dealing
- D. to dealing

7.3.

- A. However
- B. Unless
- C. Whether
- D. If

7.4.

- A. place
- B. run
- C. term
- D. attempt

***PRZENIEŚ ROZWIĄZANIA NA KARTĘ ODPOWIEDZI!***

**Zadanie 8. (0–4)**

**Przeczytaj tekst. Uzupełnij każdą lukę (8.1.–8.4.) jednym wyrazem, tak aby powstał spójny i logiczny tekst. Wymagana jest pełna poprawność gramatyczna i ortograficzna wpisywanych wyrazów.**

STORKS NEST IN BRITAIN FIRST TIME IN 600 YEARS

Over the past few weeks, a pair of love-struck storks have **8.1.** \_\_\_\_\_ seen building a nest on top of a 36ft high chimney at Thrigby Hall Wildlife Gardens in Norfolk. This is a rare sight in the UK, as storks breed mainly in continental Europe. In fact, these spectacular birds last nested in the UK in 1416 on St. Giles Cathedral in Edinburgh. **8.2.** \_\_\_\_\_ then they have not bred naturally here.

Delighted wildlife lovers in England are keeping their **8.3.** \_\_\_\_\_ crossed, hoping the storks will soon enjoy a happy event. The birds will be closely watched for feeding activities or any other sign that the young have arrived. It will be a day for great celebration if these storks manage to breed successfully in the traditional way because earlier attempts to encourage stork breeding **8.4.** \_\_\_\_\_ out to be a failure.

*adapted from www.telegraph.co.uk*

**Zadanie 9. (0–4)**

Uzupełnij zdania 9.1.–9.4., wykorzystując podane w nawiasach wyrazy w odpowiedniej formie. Nie należy zmieniać kolejności podanych wyrazów, trzeba natomiast – jeśli jest to konieczne – dodać inne wyrazy, tak aby otrzymać logiczne i gramatycznie poprawne zdania. Wymagana jest pełna poprawność ortograficzna wpisywanych fragmentów zdań. Uwaga: w każdą lukę możesz wpisać maksymalnie pięć wyrazów, wliczając w to wyrazy już podane.

9.1. During the last lesson, our chemistry teacher explained how (*avoid / spill*) \_\_\_\_\_  
\_\_\_\_\_ the chemicals in the lab.

9.2. Children should (*encourage / take*) \_\_\_\_\_  
risks and make their own mistakes while they are still young enough to learn from them.

9.3. I still don't know which major to choose. As soon as I (*make / mind*) \_\_\_\_\_  
\_\_\_\_\_, I will let you know.

9.4. I'm sure this gadget is Stephen's idea. He (*must / invent*) \_\_\_\_\_  
\_\_\_\_\_ it last year when he was unemployed for a few months.







# **BRUDNOPIS (*nie podlega ocenie*)**



## TRANSKRYPCJA NAGRAŃ

### Zadanie 1.

#### One

I'm here to present our annual *Cream of the Crop* sales challenge! There's a chance to win a luxury white-water rafting trip for two on the Colorado River. The idea is simple: the representative who sells the largest number of our brand's products between now and June 1<sup>st</sup> will be awarded a five-day rafting trip. The runner-up wins a two-day trip. The results will be announced at the company picnic on July 2<sup>nd</sup>. The challenge starts today, so if you like the idea of a spectacular adventure on the rapids of the Colorado River, get started straight away!

*adapted from www.writeexpress.com*

#### Two

The conservation charity the World Wildlife Fund has issued a warning about the effects that climate change is having on the snow leopard in the Himalayas. The charity says that rising temperatures are shrinking the snow leopard's natural habitat to the point that they could die out. Much of the fauna the animals need to survive could soon disappear. But it isn't just the climate that is posing a serious threat to the future of the species. Snow leopards are highly sought after for their fur. What's more, as their natural prey is decreasing, there have been incidents of leopards venturing into areas inhabited by humans and attacking farm animals. As a result, leopards are also being killed by farmers trying to protect their livestock.

*adapted from breakingnewsenglish.com*

#### Three

*Inez:* Today in the studio we have Mark, a successful owner of an antiques shop. Mark, is it easy to run a business nowadays?

*Mark:* Definitely not. I guess it would be a fair bet that about 50 percent of all start-ups fail within the first year.

*Inez:* Why is that?

*Mark:* Well, I think that only experts in a given field have any chance of making a profit so before you start a company you should have professional training in the business you plan to operate in.

*Inez:* And once someone has completed their training, what should they focus on?

*Mark:* They ought to do a lot of market research. I've read the latest data from the Chamber of Commerce and I can see that just 10% of people do that before they open their own business. It seems to me that some of them think that if they are great bakers, they'll run a bakery successfully. Unfortunately, that's not necessarily the case.

*Inez:* Could you tell us something more about how you got started, Mark?

*adapted from She, November 2005*

### Zadanie 2.

#### One

Everybody needs some kind of organization in their lives. Making order should begin at home, in your immediate surroundings. You'll gain more room and stop stumbling over things. However, most people simply do not have enough energy or time to declutter and put off the decision to do it as long as possible. Does that sound like you? Don't lose hope. That's what we're for. Book a visit from our professional decluttering company and let us deal with your problem. No more walking past cupboards of useless stuff or opening drawers overflowing with bits you never have time to sort out!

*adapted from www.youneedavicky.com*

## Two

I understood I had a clutter problem when I looked in a bag on the dining room sideboard in early December and found ... Christmas presents I'd received the previous year! Luckily, I stumbled upon the clutterdiet.com website. As a result, I spent all Sunday afternoon prioritizing tasks for the following days, and preparing e-mail reminders to do them. I also joined a discussion board on decluttering. When I saw comments from strangers willing to take their time to congratulate me on my progress, I felt really motivated.

*adapted from clutterdiet.com*

## Three

Making mistakes while decluttering can put you off doing it. Here is how I avoid that. I walk around my house with a pen and a notepad and write down any items that I haven't used for a long time. I open cupboards, drawers and wardrobes. Once I've made the list, I go through it and ask myself if I really need those items. Obviously, I think twice before I get rid of an item which was expensive. In that case, I put it on an Internet auction. By clearing your space, you clear your mind. Surrounded by clutter, you are more anxious and likely to experience stress or frustration.

*adapted from www.gioia.net.nz*

## Four

Do you need the help of an organizing professional? Check out how to harness chaos in your home! Here are some tips. Clean out first, then buy the boxes and baskets to store the stuff you want to keep. Once you've decided where something's going to go – take it there. It's advisable to clear out one room or space every day. This way you will avoid getting burnt out in the process. And a word of warning. Lots of people put things they don't need anymore in bags and decide to dispose of them later. Don't ever do that! If you keep the useless stuff at home, it might stay there for good.

*adapted from <http://www.apartmenttherapy.com>*

## Zadanie 3.

**Interviewer: Trevor Baylis, best known as the inventor of the wind-up radio, is with us today. Trevor, what gave you the idea for this radio?**

*Trevor Baylis:* I was watching a programme about a disease in Africa which was killing many people. The only way they could get information about how to prevent it was through the radio. But in many remote parts of Africa there was no electricity. And batteries were rare and horrendously expensive. I wanted to find an alternative solution. I thought of the old-fashioned gramophone which had a handle on it. You had to turn it to make the record go round and play. And I thought that the same idea could be used for a radio. You see, you just wind the thing up and when you release the spring, it drives a small dynamo, which in turn drives the radio.

**Interviewer: Well, that sounds quite simple. So why do so few of us become inventors?**

*Trevor Baylis:* In my opinion, anybody can be an inventor. Basically, we all have good ideas which we do nothing about because they don't seem like inventions to us. Then, a few years later, we see a product based on the same concept in the shop window and wonder why we gave up on that idea in the first place. It's always disappointing but it shows that your idea had much more potential than you thought.

**Interviewer: I heard recently that science and engineering courses are becoming less popular. That must be bad news for would-be inventors.**

*Trevor Baylis:* I think it is. Young people need to get at least a glimpse of the basics of engineering. If the power goes off, they should know how to reset a circuit breaker. They ought to know how to do minor car repairs or bike maintenance

work. They should learn how to cut a bit of wood with a saw and make items for the garden like a planter box or a bench. We should provide them with sufficient hands-on experience, so if they buy a house in the future, they can do the necessary repairs.

**Interviewer: Is information technology helpful for inventors in their work?**

*Trevor Baylis:* Undoubtedly, it makes preparing a prototype much easier. In my day, we only used handheld tools. Now you can produce a three-dimensional picture on a screen, which can then be converted into a real thing made of plastic or some alternative material. But that doesn't mean computers are the solution to every problem. Don't get me wrong, I'm not suggesting the computer should be put in the bin, it's a wonderful piece of equipment. However, it's just a tool. If you lose that tool or it breaks down – what are you going to do? You've got to have a backup plan. You need to know where else you can look for the information that you need. Also, you ought to be able to do things by hand.

**Interviewer: The statistics show that only 10% of all patents have been obtained by females. Why is this so?**

*Trevor Baylis:* We have to look at the problem in a broader historical context. There were periods when women's access to education and careers was limited. Also society's expectations for them to be mothers and wives meant they were not encouraged to become inventors. And even if a woman invented something, it wasn't given as much recognition as things created by a man. Has anybody heard of Grace Hopper, who invented programming languages, or Mary Anderson, the inventor of windshield wipers?

**Interviewer: Thankfully, a lot has changed in recent years.**

*adapted from [www.bcs.org](http://www.bcs.org); <http://cogsci.stackexchange.com>*