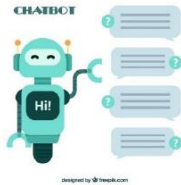


Artificial Intelligence

Vocabulary Practice: Artificial Intelligence in your everyday life

Warm-Up

1. In pairs, look at the pictures below and answer the questions:



- a) How would you define Artificial Intelligence or AI?
b) What activities are computers better at than humans now? Which are humans better at than computers?
c) Computers get faster and better every year. Is it just a matter of time before they become more intelligent than humans?



2. We can change the form of a word (e.g. from a verb to a noun) by adding suffixes. Use the words given in capitals at the end of sentences and the suffixes below to make new words and fill in the gaps.

-ment -ion -ive -y -ity -ous -able -ed

Many times researchers study some areas to satisfy their CURIOSITY but as a result new things are invented. **CURIOUS**

Recent DEVELOPMENT in machine learning has allowed us to create machines that can win with humans in some areas. **DEVELOP**

Engineers can now apply ADVANCED technological solutions to automatize many tasks that required human input. **ADVANCE**

Machines are not always RELIABLE and sometimes break down so we should limit how much we depend on them in everyday life. **RELY**

There are NUMEROUS reasons why we should create artificial intelligence. **NUMBER**

Some people believe that AI is such a TRANSFORMATIVE technology that it will change our lives just as the Internet or TV did **TRANSFORM**

The INVENTION of gunpowder was one of the most significant achievements of the Middle Ages in China. **INVENT**

Their DISCOVERY was quickly confirmed, making it the first confirmation of planets outside our Solar System **DISCOVER**

VIDEO AND DISCUSSION

3. Watch a video [<https://youtu.be/mJeNghZXtMo>] about AI (up to 3:51) and write down the answers to these questions:

- a) What does the AI field of science deal with? In basic terms AI is a broad area of computer science that makes machines seem like they have human intelligence.
- b) When was the term “artificial intelligence” invented? 1956 by John McCarthy
- c) What are the factors responsible for the growth of AI in the recent years? A lot of data + higher data processing speed making it efficient
- d) How is AI being used now? Chatbots, Siri/Cortana

4. Select the right option in the sentences below.

- a) AI is designed so you don't realize there's a computer **calling/firing** the shots.
- b) The term "artificial intelligence" was first **crafted/coined** by Dartmouth professor John McCarthy.
- c) And now thanks to **advances/advantages** in processing speeds, computers can actually make sense of all this information more quickly.
- d) Tech giants and **venture/visiting** capitalists have bought into AI and are infusing the market with cash and new applications
- e) That means AI can manifest itself in many different ways. Let's **break/take** down the options.
- f) Natural language processing makes these bots a bit more **shallow/sophisticated**.

5. In pairs, discuss the following points:

1. How does Artificial Intelligence impact our life today?
2. How could the artificial intelligence technology be used in the future?
3. What are the key advantages of this technology in your opinion?
4. How worried should we be about AI replacing our jobs?
5. What aspects of AI can make it dangerous?
6. Why might some people think that too much technology in our lives can cause problems?

6. Watch a video from Google I/O conference 2018 [<https://youtu.be/D5VN56jQMWM>] and consider these points:

- a) What's your opinion of this use of AI technology?
- b) Which aspect of this technology do you find most surprising?
- c) Would you be willing to use it yourself? Why/Why not?



VOCABULARY PRACTICE: WILL AI CREATE MILLIONS OF JOBS?

7. Discuss the questions.

- Do you think ATMs destroyed or created jobs?
- Do you think we have fewer translators because of such solutions as Google Translate?
- What jobs will AI create or develop? Which occupations will experience growth thanks to AI?

8. Read the text, find the answers to the questions in ex. 7. and choose the best word to complete each gap in the text.

The Rise of Artificial Intelligence

By Byron Reese

You hear the same refrain: “Artificial Intelligence will destroy jobs.” Consider the ATM. If you had to point to a technology that looked as though it would **(a)** people, the ATM might look like a good bet; it is, after all, an automated teller machine. And yet, there are more tellers now than when ATMs were **(b)** released. How can this be? Simple: ATMs lowered the cost of opening bank branches, and banks **(c)**by opening more, which required hiring more tellers.

In this manner, AI will create millions of jobs that are far **(d)** our ability to imagine. For instance, AI is becoming adept at language translation—and according to the US Bureau of Labor Statistics, **(e)** for human translators is skyrocketing. Why? If the cost of basic translation drops to nearly zero, the cost of doing business with those who speak other languages **(f)** Thus, it emboldens companies to do more business overseas, creating more work for human translators. AI may do the simple translations, but humans are needed for the nuanced kind.

In fact, the BLS forecasts faster-than-average job growth in many occupations that AI is expected to impact: accountants, forensic scientists, geological technicians, technical writers, MRI operators, dietitians, financial specialists, web developers, loan officers, medical secretaries, and customer service representatives, to name a **(g)** few. These fields will not experience job growth in spite of AI, but through it.

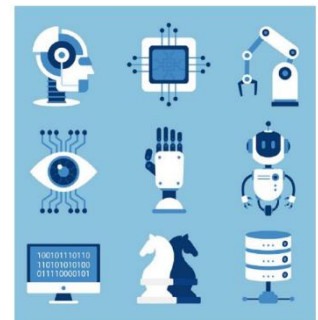
But just as with the internet, the real gains in jobs will come from places where our imaginations cannot **(h)** take us.

Adapted from: <https://singularityhub.com/2019/01/01/ai-will-create-millions-more-jobs-than-it-will-destroy-heres-how/>

- (a) take **replace** destroy succeed
- (b) quickly more not **widely**
- (c) **responded** response respond responding
- (d) **beyond** away under over
- (e) growth development supply **demand**
- (f) drop **falls** fails fell
- (g) **very** just lot quite
- (h) already just over **yet**

9. Discuss the questions below.

- How do you think your profession will be impacted by Artificial Intelligence?
- In your opinion, is Artificial Intelligence a threat or an opportunity for jobs?
- How can we avoid people being “left behind” by automation?
- What kind of new jobs do you think AI can create?



VOCABULARY PRACTICE: THE JOBS WE’LL LOSE TO MACHINES—AND THE ONES WE WON’T

10. What kind of professions will disappear in the next 10-15 years and which ones will become more common?. Fill in the table below:

DYING PROFESSIONS	TOP FUTURE JOBS
bank tellers, bookkeepers, typists, cashiers, payroll clerks, secretaries, door-to-door salespeople, factory worker etc.	software engineers, database administrators, healthcare jobs (nurses, personal care aides), service technicians, information security analyst

11. Watch a TED talk [<https://youtu.be/gWmRkYsLzB4>] and answer these questions:

- a) What were the findings of the study carried out at Oxford University?
Almost one in every two jobs have a high risk of being automated by machines.
- b) What does machine learning enable?
Learning from data and mimicking some of the things that humans can do.
- c) What could machine learning do in the 1990s and what can it do now?
Assess credit risk of loans, sort the mail by reading handwritten characters from zip codes (the 1990s). Grade high-school essays; perform eye check-ups (now).
- d) What are the things that humans can do and machines can't?
Tackle novel situations
- e) How was the microwave oven invented?
A physicist was working on radar during World War II, when he noticed the magnetron was melting his chocolate bar.
- e) What two examples of tasks that humans are better at did the speaker mention?
Preparing a copy for a marketing campaign and developing business strategy.

12. In small groups, discuss the following points:

- Do you think that technology steals people's jobs?
- In what type of job might a human be happy to have a robot take over some tasks?
- Who might be affected positively and negatively by the addition of robots in the workforce?
- If robots take on some tasks currently performed by humans, how might the humans' jobs change?
- How can we change the education to prepare new generations for automation?

13. You will be divided into two groups. One group will be in favour and the other against the following statement:

Robots are taking over humans' jobs.

In groups, prepare three/four arguments to support your opinion and think how to refute any potential counterarguments of your opponents.