Humans and machines: collaboration, not competition

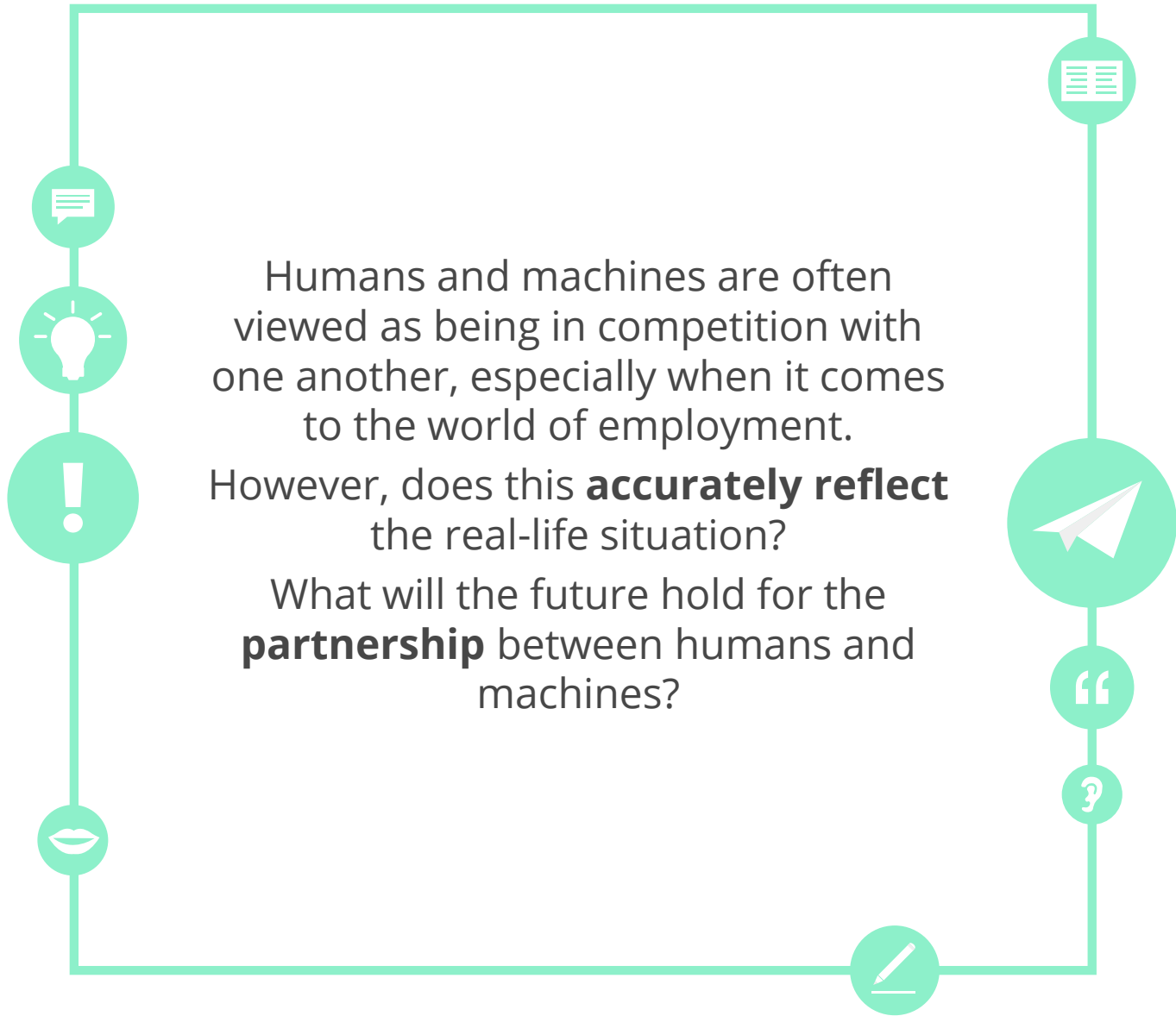| LEVEL	NUMBER	LANGUAGE
Advanced	C1_4055R_EN	English

Goals

- Can read and understand a complex text about humans working with machines.

- Can discuss the prospect of humans collaborating with machines in depth.

Humans and machines are often viewed as being in competition with one another, especially when it comes to the world of employment.

However, does this **accurately reflect** the real-life situation?

What will the future hold for the **partnership** between humans and machines?

What do we mean when we talk about collaboration?

What makes a successful collaboration?

Imagining the future

Look at the pictures below.
In what ways could machines help humans in these situations?

Machines and you!

Discuss what ways you already collaborate with machines and technology.

driving and transport

at home

life organisation

shopping

Humans and machines: collaboration, not competition

In recent years there has been **excessive** talk about humans having to compete with machines for jobs. Much **dialogue** has focused on the supposed tension between humans and machines, rather than examining the possible positive outcomes of collaboration between the two. Many experts in the field of robotics are **urging** us to begin to look at machines as an **asset** to society, rather than a **threat**.

While the **effect** of **automation** on employment is a valid concern, there has been relatively little research carried out in this area. Furthermore, many experts disagree about what the consequences of further automation and advanced robotics will mean for the job market. Some experts argue that automation will result in a dramatic **upheaval**, especially when it comes to **white-collar jobs**. Many people working in white-collar roles might then need to **undergo** retraining in order to compete with the machines.

White-collar jobs

Discuss what you consider to be a **white-collar** job.

Give at least 5 examples.

Finding synonyms

Look at the words and phrases from the text on the cards below. Can you think of synonyms for each?

| excessive | asset | urge |
| threat | effect | upheaval |

Multiple choice questions about the text

1. Many experts in the field of robotics are asking that we begin to look at machines as

   a. helpful
   b. something to be concerned about
   c. something to ignore
   d. a direct threat

2. Collaboration is:

   a. working together towards separate goals
   b. working together towards shared goals
   c. working separately
   d. interaction between two parties

3. Some experts think automation

   a. will result in a few changes for human employment
   b. will not result in any changes for human employment
   c. will result in huge change for human employment
   d. is not a concern

4. Which is not an example of a white-collar job?

   a. builder
   b. sales manager
   c. chief financial officer
   d. HR manager

Look at the photos below, in what ways do humans and machines already collaborate in each field? How might this be further developed in the future? Are there any problems that might need to be addressed as a result of this collaboration?

partnership

resistance

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There is another side to the story. Of the research that has been carried out so far, most results show that humans and machines work best when they **collaborate**. For example, some advanced AI software has the ability to help **detect** and **diagnose** certain serious illnesses. However, research has shown that while this advanced AI software is of great help in the detection of serious diseases, doctors working by themselves still perform significantly better than the software on its own. What is really interesting, is that when doctors work in collaboration with the AI software, some truly magnificent results are reported. Could we be looking towards a future where humans and robotics cooperate to obtain the best results?

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AI's potential for being able to greatly **augment** human capabilities is not just confined to the field of medicine. Robotics may also be able to transform the nature of work in manufacturing industries. For example, it's likely that automated systems will soon be able to play a wider role in goods distribution and **customisation**.

We **collaborate on** something, but we **collaborate with** someone.

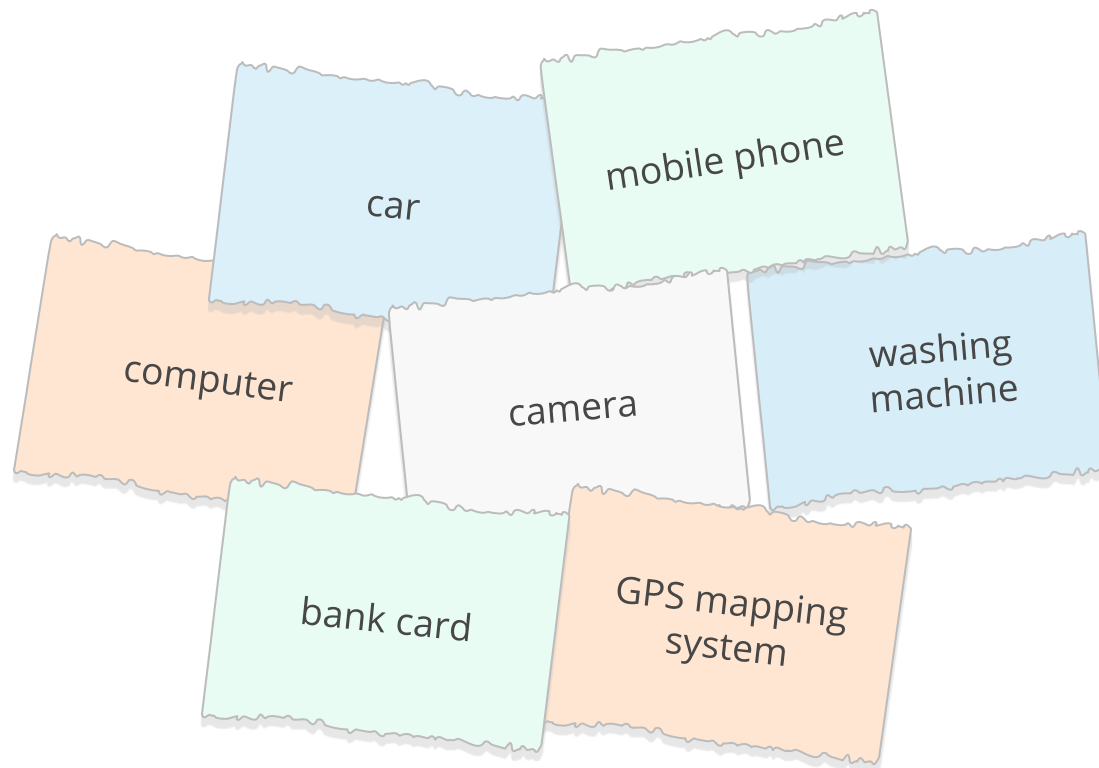What have you **collaborated on**, and who have you **collaborated with**?

What does the text tell us about machines and humans and their potential for collaboration in the field of medicine?

Fear of change

Look at the inventions on the cards below. Why might people have been concerned about these changes? Were their fears justified? What advantages do these inventions offer to humans?

car

mobile phone

computer

camera

washing machine

bank card

GPS mapping system

Humans and machines: collaboration, not competition

One example of collaboration is drone technology which has already been put to the test in some parts of Switzerland. In the summer of 2014, the country ran tests where **unmanned** drones were used to deliver parcels as part of the postal service. While it's not expected that drones will be put to **widespread** use as part of the country's postal service until at least 2020, the technology could be of great assistance to the service. It's expected that once further testing has been completed to improve battery life and ensure the safe use of the technology, drones could be used to make deliveries of emergency supplies in remote areas. They could also be used to perform urgent and high priority deliveries.

Humans and machines: collaboration, not competition

Despite these positive developments, technology experts are not wholly **unconcerned** about the future of their work. Experts worry in particular about the reduction in quality of many jobs. The **stagnant** nature of GDP in countries such as the USA, is also a source of frustration for developers and researchers since this can restrict new economic opportunities.

However, for the most part the future of the partnership between humans and machines looks rosy. If development of AI can offload boring, routine tasks from humans, and allow us to **enhance** our **capabilities** across a broad range of fields, then this is surely cause for celebration.

lingoda

Pros and cons

The text mentions the testing of drone technology in Switzerland. Look at the examples on the cards below. What are the pros and cons of the technology used in each case?

drones replacing postal workers

automatic checkouts replacing supermarket cashiers

virtual personal assistants instead of humans

online customer support instead of human helplines

Collaboration not competition

In each example on the previous slide, machines replaced humans. Now imagine that instead of the machines replacing humans, humans and machines work in collaboration.

What would an ideal collaboration include for each case?

pros	How would humans benefit?	cons

Convincing a friend

Your friend is very skeptical about humans and machines collaborating. Can you change their mind? Your teacher will play the role of your friend, address their concerns and use examples to convince them that collaboration between humans and machines is a good idea!

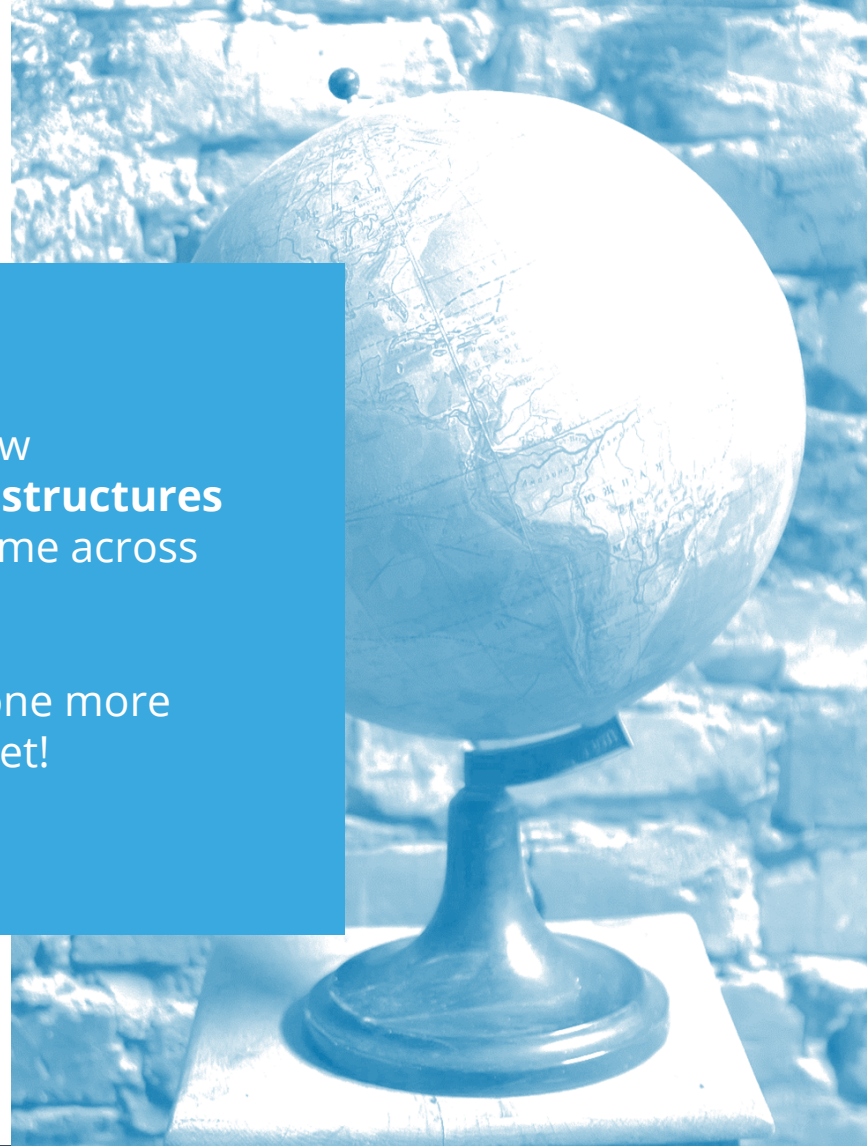|		
job loss	medicine	job creation
offloading of routine and boring tasks	collaboration not competition	examples from the past

Reflect on this lesson

Take a moment to review any new **vocabulary**, **phrases**, **language structures** or **grammar points** you have come across for the first time in this lesson.
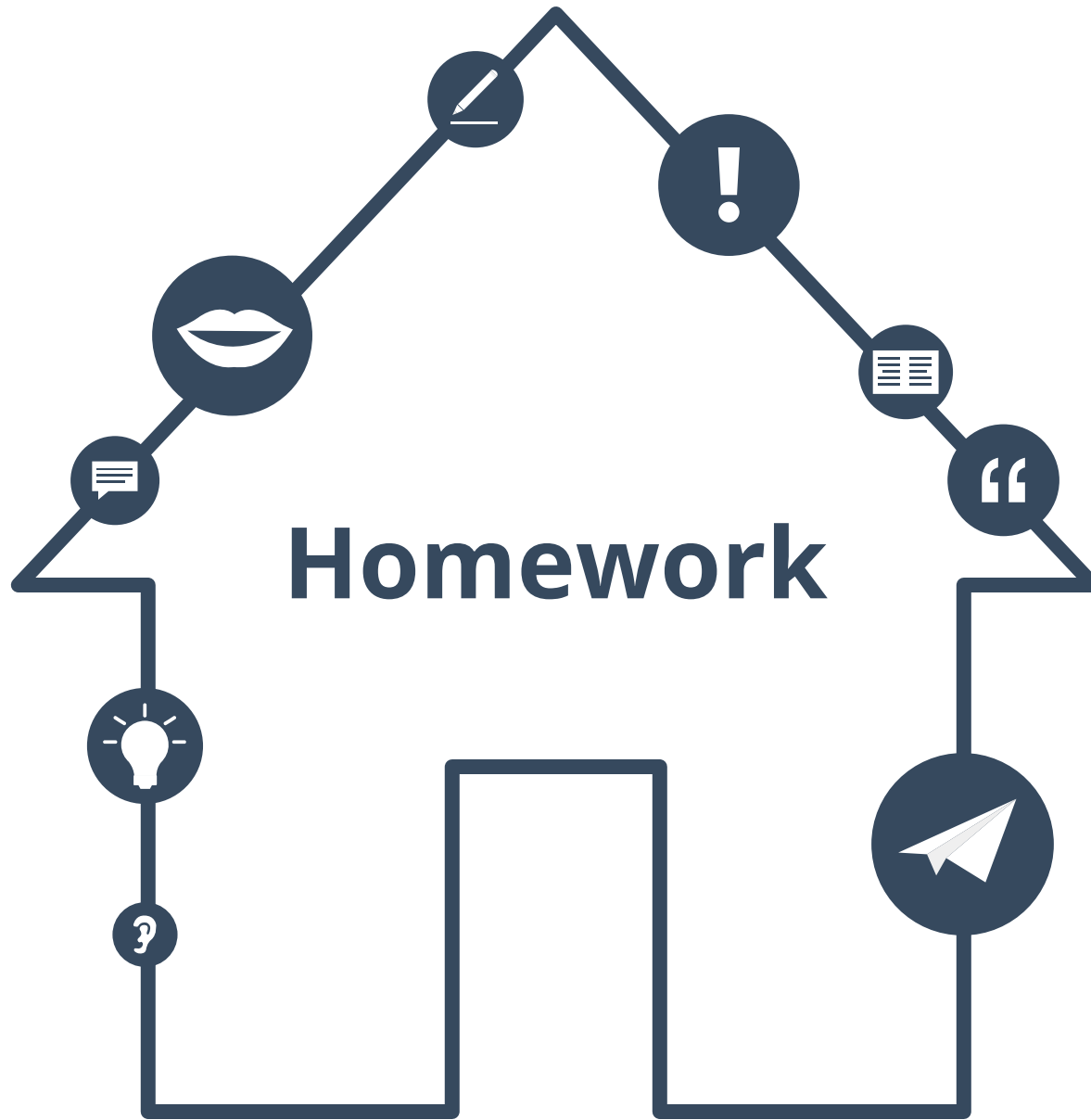
Review them with your teacher one more time to make sure you don't forget!

Answer key

Activity p.10
1a, 2b, 3c, 4a

Homework

Pronunciation

Which words from the text did you find most difficult to pronounce? Write a list here and practise your pronunciation of each by using them in sentences of your own!

Humans and machines

Pros and cons

Write a list of pros and cons relating to human and machine collaboration.

pros	cons

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