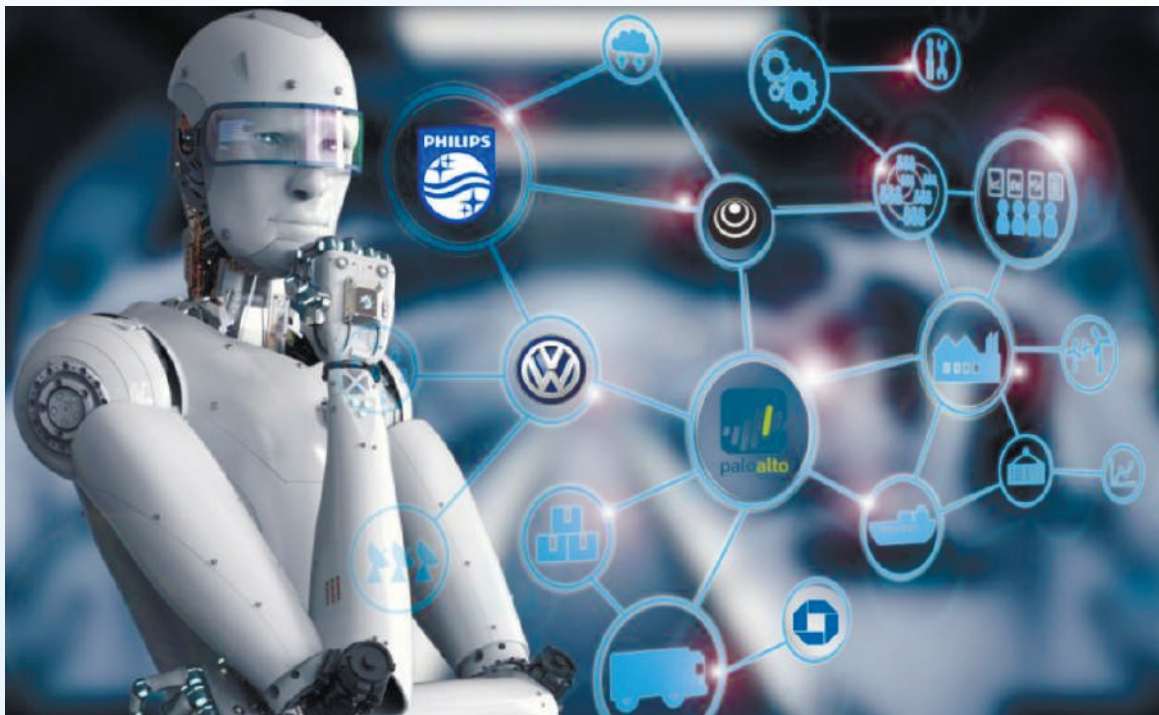# Artificial intelligence (a worksheet)

Activity 1

Discuss the questions with your partner.

1. What is Artificial Intelligence?
2. What can computers do better than people?
3. What can people do better than computers?
3. What are the advantages and disadvantages of artificial intelligence?
4. What would you like to know about artificial intelligence?
5. How would you like artificial intelligence to help you?
6. Have you seen any movies about artificial intelligence?
7. What will artificial intelligence be like in 100 years from now?
8. Where is AI being used already?
9. What can AI do – and what is it not able to do?
10. How is AI going to change the way we work?
11. How is AI going to change our lives?

Activity 2

*Watch the **video** and answer questions about Artificial Intelligence*

1. How does artificial intelligence make life easier?
2. What examples of artificial intelligence do we use in everyday life?
3. How does our Facebook feed suggest what will interest us?
4. What is the Internet of Things?
5. What is Mindsphere?

Activity 3

With your partner have a look at these modern robots. For each robot write 3 things you think it can do.

*Watch the **video** and check your answers. Which of the 10 robots is the most interesting?*

Activity 4

Read the article about artificial intelligence and come up with a headline for each paragraph.

Artificial intelligence (AI) is actually being used more than you might think. Here's what you need to know about the current state of AI and where it's going.

1. _____
For many of us, the idea of AI conjures images of a robot or other anthropomorphic machines that can think and reason as well as a human can. The idea of a machine-man is seen as early as some of the Greek Myths, such as the golden robots of Hephaestus. Additionally, stories of alchemy in the Middle Ages alluded to the placing of the human brain in inanimate objects. Also, some religions that worship physical statues believe the statues to be possessing of human thought and emotion.

2._____
In 1950, Alan Turing published his paper Computing Machinery and Intelligence, where he tried to figure out if a machine could win what he called "The Imitation Game," which is also the name of the recent film about Turing. The test had a computer try to distinguish between the gender of two players. The paper also first introduced the Turing Test. Computing Machinery and Intelligence is largely regarded as the seminal work on AI.

3. _____
While AI research was happening prior, it didn't become a formal academic research discipline until the The Dartmouth Conference of 1956.

4. _____
One of the major goals of AI is getting a computer to understand and subsequently communicate in natural languages, a field called natural language processing (NLP). The computer must take natural human languages, like English or Spanish, and glean insight that it can process..

5. _____
One of the biggest technological advancements in transportation over the last few years has been the creation of autonomous vehicles, or vehicles that can pilot themselves. New vehicles like Google's driverless cars, and some autonomous drones wouldn't be possible without some of the top AI technology we have today.

6. _____
What's considered a "hot" market for startups typically ebbs and flows, but it's obvious that AI is definitely a hot market. According to CB Insights, the number of new startups being funded in the space is growing. Some companies, like Sentient Technologies, have raised more than $100 million in funding after a few years in operation.

7._____
Small startup companies aren't solely responsible for the surge in AI. Major tech giants are investing in the space and acquiring AI companies as well. IBM's Watson is doing everything from working with hospitals to cooking meals. Google made news when it acquired AI startup DeepMind for $400 million, and Facebook recently purchased Wit.ai.

8. _____
The CoCoRo (Collective Cognitive Robotics) Project in Europe has developed robots with artificial intelligence that can function in unison like a school of fish. The robots can search an area, scan the environment, and send information among one another.

9. _____
A robot called Kismet, from MIT's Artificial Intelligence Lab, can interact by recognising human body language and tone of voice and reposting according to that input. Kismet was developed Cynthia Breazeal in the 1990s.

10.   _____
Few technologies are as contentious as AI. On one hand, major companies and universities are pouring money into AI research and development. On the other hand many scientists and famous people are wary of it.
From "*10 Things You Need To Know About Artificial Intelligence*" by Conner Forrest

Activity 5

R2D2 and C3PO are arguably the most famous fictional robots. With your partner choose one robot each and debate which one is the most useful. When coming up with arguments, think about their:

- Abilities
- Personal qualities
- Communication with/service to humans