

# UNIT 2 - BEHAVIORAL SCIENCE

## READING I – Technology and Change



### PREVIEW THE READING

#### A. Quick Discussion



Discuss these questions with your classmates.

1. What technology do you see in the photo?
2. What are the people in the photo doing?
3. How do you usually spend time to relax at home?

#### B. Preview Read the title of the article and answer the questions below.

1. What do you already know about the topic?
2. What do you hope to learn from the context?

## C. Vocabulary

a) Here are some words from Reading 1. Read the sentences. Then write each underlined word next to the correct definition.

- 1) I don't have a large circle of friends, but that's OK.
- 2) I only need one device. I use my phone to talk, send email, text, and take photos.
- 3) Our new refrigerator is very efficient. It uses less electricity than our old refrigerator.
- 4) I cannot work without my cell phone. My cell phone is necessary for my work.
- 5) I share photos of my family with my friends online.
- 6) My new car has more power than my old car. It's much faster.
- 7) I see what my friends are doing every day on social media.
- 8) I want to invent a new way to travel.

- a. \_\_\_\_\_ (*verb*) to think of or make something for the first time
- b. \_\_\_\_\_ (*verb*) to post something, usually online, for others to see
- c. \_\_\_\_\_ (*noun*) a group of people who are friends or who have the same interest or job
- d. \_\_\_\_\_ (*noun*) a tool or piece of equipment that you use for doing a special job
- e. \_\_\_\_\_ (*noun*) the energy or strength that something has
- f. \_\_\_\_\_ (*noun*) websites where people communicate with friends, family, and co-workers
- g. \_\_\_\_\_ (*adjective*) working well and quickly, without wasting time or energy
- h. \_\_\_\_\_ (*adjective*) needed or required

b) Fill in the blanks with the words given above.

1. The news has spread out quickly via \_\_\_\_\_; therefore, everyone found out.
2. Graham bell \_\_\_\_\_ the phone in 1876 and contributed a lot to mankind.
3. After stealing all the money from the bank, the thieves \_\_\_\_\_ it and disappeared into different directions.
4. Some young people gathered around the fire at the beach and made a \_\_\_\_\_ to sit and have fun.
5. Electronic \_\_\_\_\_ are lifesavers although they are expensive and easily-broken .
6. The way he is trying to solve the problems is very quick and \_\_\_\_\_.
7. \_\_\_\_\_ precautions will be taken before they start to demolish the building.
8. There are always \_\_\_\_\_ cuts in this vicinity. People have started to get tired of it.



## TECHNOLOGY AND CHANGE

1 I was born 26 years ago. On my first birthday, my parents took photos. Then they printed them at a store. After that, they mailed them in an envelope to my grandparents. Ten days after my birthday, my grandparents saw photos of me with my birthday hat.

2 The world is changing. On my son's first birthday, I video-called my parents. After that, I **shared** the video and many other photos online. That very day, all my friends and family around the world saw photos of my boy in his birthday hat. Technology is changing the way we live in so many positive ways.

3 In fact, the **power** and speed of computers double every two years. In 1969, giant computers sent people to the moon. Today, the little smartphone in my pocket is much more powerful than those computers. My phone won't take me to the moon, but it connects me to people and to the world in important ways.

4 In the past, humans had small social networks. They knew about 150 friends, neighbours, and family members. They kept up in daily conversations. As people went to different schools and moved to new places, their social **circles** also changed. They lost touch with old friends and made new ones.

5 With **social media**, we no longer lose touch with our old friends. We stay in touch, no matter how far apart we live. We keep old friends and make new ones. We connect friends from different circles. According to the website DIGITAL IN 2018, the number of social media users grows by 10% a year. Today, you can connect to up to three billion people on social media. That number will be bigger tomorrow!

6 Technology doesn't just connect people. It connects us to things, like our homes and cars. This is called the *Internet of Things* (IoT). In fact, more things than people connected to the Internet. And this number will grow by billions in the years to come.

7 Smart **devices** turn on and off without our effort. Lights turn on when we enter a room. The heat goes up when the sun goes down. A front door opens when it sees our face. Refrigerators turn on only when **necessary**. We have a more comfortable and **efficient** home. These smart devices also communicate with us. For example, a smart refrigerator

knows when there is no milk and adds it to our shopping list. Our cars tell us when we are in danger of an accident. A home security system tells us when a box arrives at our home. In our safer, more efficient, more comfortable homes we can relax. And we can use the extra time we have to connect to our large circle of friends and family around the world!



## WORK WITH THE READING

### A. Identify Choose the main idea of the article.

1. Technology is changing our lives in many positive ways.
2. Technology keeps us in touch with our old friends.
3. Technology gives us time to relax.
4. Technology makes communication much easier today.

### B. Discuss Ask and answer the questions. Then report to the class.

1. What did you find interesting?
2. What did you agree with?
3. What did you disagree with?
4. Was there anything you didn't understand?

## CRITICAL THINKING STRATEGY

### Identifying point of view

**Point of view** is an opinion or way of thinking about something. Authors often write from their own point of view. Their life experience forms their opinions.

When you read something, ask yourself: *Who wrote this? What point of view does the author have? Why does the author have this point of view? What is the author's life experience?*

For example: "I miss the old days, before we had computers." What do you know about this person?

- ✓ The person is over 40 years old.

**C. Interpret** What do you know about the author of the blog *Technology and Change*?

1. How old is the author?
2. What do you think his job is?
3. Why do you think he has a positive point of view on technology?

**D. Identify** Read the statements about positive changes due to technology. Write one example from the reading for each item. Write the number of the paragraph where you found the answer.

1. Our homes are more efficient.

Example: \_\_\_\_\_

Paragraph \_\_\_\_\_

2. Our homes are more comfortable.

Example: \_\_\_\_\_

Paragraph \_\_\_\_\_

3. We have more friends.

Example: \_\_\_\_\_

Paragraph \_\_\_\_\_

4. We are safer.

Example: \_\_\_\_\_

Paragraph \_\_\_\_\_



## WRITING I

### SEQUENCING WORDS AND CONNECTING IDEAS BY USING TIME EXPRESSIONS

#### 1. Sequencing words: *first, second, after that, then, finally*

When we write or talk about an event, we usually tell the story in chronological order. We use specific words and phrases such as *first, second, after that, then, finally* to indicate sequence.

#### 2. Using time expressions: *when, after, before*

Another way to order two events is to use *when, after, or before*.

'When' shows that the first event happened just before the second event:

E.g.: I told him the news **when he called**. (He called first; then I told him the news.)

**When he called**, I told him the news.

'After' shows the first event.

E.g.: I played soccer **after school / after I left school**. (school happened first; not soccer)

**After school / After I left school**, I played soccer.



'Before' shows the second event.

E.g.: I couldn't play the guitar **before** I took lessons. (lessons happened first)

**Before** I took lessons, I couldn't play the guitar.

**NOTE: When "after", "before", "when" begin a sentence, use a comma after the event.**

**A. Underline the words that indicate the order of events in the story.**

Two months ago, I found a dog in the street. First, I asked my neighbours if it was their dog, but it wasn't. Then, I made posters and put them around our village. Nobody called me. After that, I put an ad in the newspaper. A week later, a man called, but it wasn't his dog. Finally, I decided to keep the dog. His name is Joey, and he's great.

**B. Join these ideas with *when*, *after*, or *before*. Add a comma if necessary.**

1. \_\_\_\_\_ the movie we went home. (The movie is the first action.)
2. I left my house \_\_\_\_\_ you called. (First you called.)
3. We left the class \_\_\_\_\_ we turned in our assignments. (First we turned in our assignments.)
4. Please finish your homework \_\_\_\_\_ you watch TV. (First finish your homework.)
5. I woke up \_\_\_\_\_ the alarm clock rang. (First the alarm clock rang.)
6. \_\_\_\_\_ the dog barked the baby cried. (First the dog barked.)



**WRITING TASK 2**

Write a paragraph about the topic given below by answering the questions.

*"The first technological product you owned"*

- 1- What was the product?
- 2- Where and when did you get it?
- 3- What did you do when you first had it?
- 4- Do you still own this product?

## READING II- Some Things Never Change



### PREVIEW THE READING

#### A. Quick Discussion

Discuss these questions with your classmates.

1. Can you think of a technology that your grandparents did not have but that is necessary to you? Explain.
2. What new technology do you dislike? Why?
3. How much of the technology that you use every day is on your phone? If you had a day without your phone, how would your day be different?

**B. Vocabulary** Here are some words from Reading 2. Read their definitions. Then complete each sentence.

**depend on** (*verb*) to need someone or something

**digital** (*adjective*) using computer technology

**mobile** (*adjective*) able to move easily from one place to another

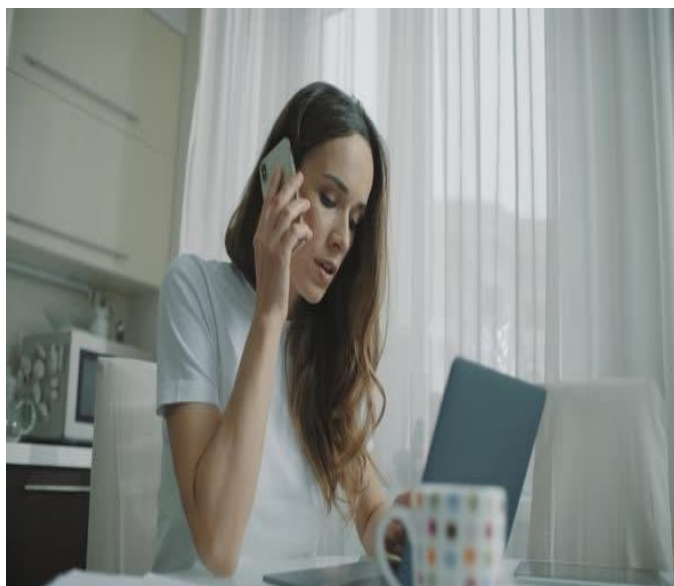
**moment** (*noun*) a particular point of time

**reply** (*verb*) to answer someone

**teenager** (*noun*) a person between 13 and 19 years' old

**to sum up** (*verb phrase*) to describe in a few words the main idea of what someone has said or written

1. A laptop computer is \_\_\_\_\_. You can take it anywhere.
2. I \_\_\_\_\_ my car. I need it to get to work every day.
3. We live in a \_\_\_\_\_ world - we do more and more things on the computer.
4. When I was a \_\_\_\_\_, I spent a lot of time in the tech lab at high school.
5. I can't check my phone at the \_\_\_\_\_, but I will listen to the message later.
6. I sent my boss an email yesterday, but she didn't \_\_\_\_\_.
7. \_\_\_\_\_, I think this is an exciting piece of new technology.



## SOME THINGS NEVER CHANGE

**1** *The other day I had an interesting conversation with my 12-year-old granddaughter.*

**4** *"What kind of phone did you have when you were my age?" she asked.*

*"We had a phone in the hallway. When it rang, my sisters and I raced to answer it." I replied.*



9 "You didn't each have your own phone?"

"Oh, no. We shared the phone. It cost money to talk on the phone, so we had short conversations."

"What about when you went to school? Who got the phone?"

13 "No one. The phone stayed in the house."

"Why?"

"It was connected to the hallway wall. It wasn't **mobile**."

16 "That's great!"

"Why?"

"Because you never lost the phone!"

19 Technology is changing the way we do everything. Today, we all **depend** on technology to connect to friends and family, work, study, get around town, shop, do business, sell things, and plan events. We all use apps in nearly every daily activity. But as I get older, I realize some things never change. Next month, I look forward to my older grandson's wedding. Of course, he used **digital** technology to plan the wedding. But the wedding itself, the marriage, is not digital. He has the same hopes and dreams my husband and I had 50 years ago when we married. And the difficult parts of life don't change either. My other grandson is a **teenager**. He says that everything now is different than in my teenage years. And in many ways, it is, but I know it is hard to be a teenager at any **moment** in history. Teenagers are between childhood and adulthood, and those changes are difficult.

29 **To sum up**, technology makes life move faster, but the basics are still the same. We still eat, sleep, work, fall in love, and have families. We still make good decisions, and sometimes bad ones. We still lose people we love and remember them over time. We are still human. Technology improves our ability to communicate and work, but it doesn't change the most important thing. We are still human after all.

## WORK WITH THE READING

**A. Identify** Find the main idea of the article.

1. Technology is changing our lives too fast.
2. Technology brings many changes, but many important things stay the same.
3. Life is very different for teenagers today.
4. Technology changes our lives, and that makes it harder for teenagers.

**B. Infer** What did you learn about the granddaughter from the essay? Write the line number where the information is found. If the information is not there, write X.

1. She has a cell phone. \_\_\_\_\_
2. She has a computer. \_\_\_\_\_
3. She takes her phone to school. \_\_\_\_\_
4. She lost her cell phone at least once. \_\_\_\_\_
5. She lives with her grandmother. \_\_\_\_\_

**C. Identify** What do you know about the author from her essay? Answer the questions.

1. Who is the author?
2. About how old is the author?
3. Why does she think not so much has changed?

**D. Interpret** Choose the statements that the author agrees with and explain why.

1. Technology can't improve every part of our lives.
2. Our lives move faster because of technology.
3. People spend too much time on their phones.
4. To be human is to love.
5. Life is changing too fast.

### **VOCABULARY SKILL Finding the correct definition**

Words in a dictionary sometimes have more than one definition. Each definition has a number. It is important to know which definition you need. Here are some tips for **finding the correct definition**.

- \* Read the complete sentence. Is the word a *noun*, *verb*, *adjective*, or *adverb*?
- \* Look at the context, or other words in the sentence. They can sometimes give you information about the word you don't know.
- \* In the example below, you can see that **definition 2** is the best definition for the word *circle* as it is used in the sentence below. The sentence refers to a person who is friendly. *Circle* can also mean "a shape," but none of the words in the sentence discuss shapes, so **definition 1** does not make sense.

E.g. She's very friendly and has a large social **circle**.

**circle** /sɑːkl/ *noun (count)* **1** a round shape; a ring:

*There are 360 degrees in a circle.*

**2** a group of people with family, work, or social connections:

*It's a technical term used in medical circles.*

**Tips for success:** Online dictionaries are excellent ways to learn new vocabulary.

**pow•er** /paʊər/ noun

**1** [non-count] the ability to control people or things; the ability to do things:

*The president has a lot of power.*

*I did everything in my power (everything I could do) to help her.*

**2** [non-count] the energy or strength that someone or something has:

*The ship was helpless against the power of the storm.*

**3** [non-count] energy that can be collected and used for making machines work, making electricity, etc.:

*nuclear power*

**4** [count] the right to do something:

*Police officers have the power to arrest people.*

**5** [count] a strong person or country:

*There is a meeting of world powers next week.*

**6** [count, usually singular] (math) the number of times that a number is to be multiplied by itself:

*4 to the power of 3 is  $4^3$  (=4x4x4=64)*

**More examples:**

My new phone is smaller than my old one, but it has more power.

I think the boss has at this company too much power.

We have solar power in our office—we get our electricity from the sun.

**Look up each bold word in the dictionary. Find the correct definition and write it on the line. Pay attention to the part of speech.**

1. Please wait just a **moment**. I'll help you very soon.

moment: \_\_\_\_\_

2. Almost every TV **network** showed the president's speech.

network: \_\_\_\_\_

3. Babies **depend on** their parents for everything.

depend on: \_\_\_\_\_



## WRITING II

### GRAMMAR Clauses with *before/before that* and *after/after that*

You can use *before, before that, after, or after that* when you write about a series of events. The words *before* and *after* make it clear to the reader that one event happened first and then another event happened.

#### **\*Before**

*Before* introduces the second event. It can be at the beginning or in the middle of the sentence.

**Before** I got a tablet, I read paper books.  
second event                      first event

I read paper books **before** I got a tablet.  
first event                      second event

#### **\*Before that**

*Before that comes* in a second sentence. It introduces information before the event. It can be at the beginning or the end of the sentence.

I got a tablet last year. **Before that**, I read paper books.  
second event                      first event

I got a tablet last year. I read paper books **before that**.  
second event                      first event

#### **\*After**

*After* introduces the first event. It can be at the beginning or in the middle of the sentence.

**After** I got a smart speaker, I never used my radio again.  
first event                      second event

I never used my radio again **after** I got a smart speaker.  
second event                      first event

**\*After that**

*After that* comes in a second sentence. It introduces a second event. It can be at the beginning or in the middle of the sentence.

I got a smart speaker last year. **After that**, I never used my radio again.

first event    second event

I got a smart speaker last year. I never used my radio again **after that**.

first event    second event

**A. For each pair of sentences, circle the first event and underline the second event.**

1. After I got a smart refrigerator, I used less electricity.
2. I got my first smartphone in 2010. Before that, I took pictures with my digital camera.
3. I dropped my phone in water last year. After that, I got a waterproof case for it.
4. After I posted a photo on social media, I got 100 "likes."
5. Before I got a car with GPS, I got lost often.
6. I shared photos on social media after I got back from vacation.

**B. Read the sentences. Write two sentences with *before* or two sentences with *after that*.**

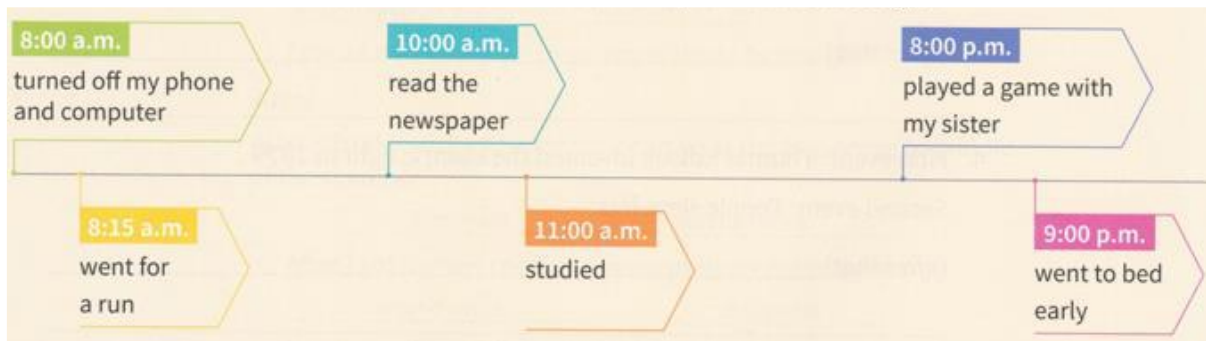
1. First event: People travelled on horses.  
Second event: Karl Benz invented the first car.  
(before) \_\_\_\_\_
2. First event: People got information from libraries.  
Second event: The Internet was available in the U.S.  
(before) \_\_\_\_\_
3. First event: People started using GPS in their cars in 2000.  
Second event: Many people stopped using paper road maps.  
(after that) \_\_\_\_\_
4. First event: Thomas Edison invented the electric light in 1879.  
Second event: People slept less.  
(after that) \_\_\_\_\_

### C. Complete the sentences.

1. Before electricity was invented, \_\_\_\_\_
2. After cell phones became popular, \_\_\_\_\_
3. The refrigerator was invented in 1834. Before that, \_\_\_\_\_
4. The first airplane flight was in 1903. After that, \_\_\_\_\_
5. I had my meal late at night. After that, \_\_\_\_\_
6. After the debut of NETFLIX, \_\_\_\_\_
7. Before the outbreak of COVID 19, \_\_\_\_\_

### WRITING SKILL Making a timeline to plan your writing

A *timeline* is a list of important events and the times that they happened. You can make a timeline to help you write a narrative—a story.



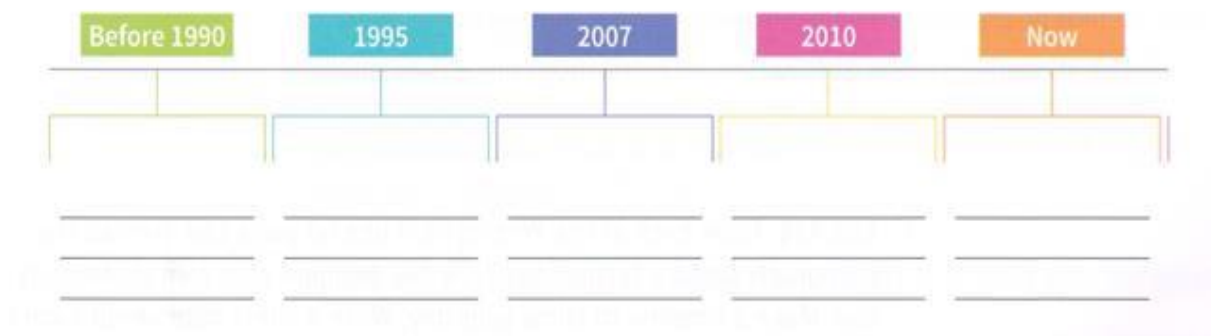
Here is a paragraph based on the timeline. Notice that you can add details to your paragraph that are not included in your timeline. Use your timeline only as a guide for your writing.

*I had a technology-free day last Saturday. It was great. Before I did anything else, I turned off my computer and cell phone. After that, I went for a run outside at 8:15 a.m. I usually run with music, but this time I just listened to the sounds of the outdoors. After that, I read the newspaper and ate breakfast. It was so quiet. After I ate breakfast, I studied my chemistry textbook. In the evening, I played a game with my sister. It was nice to do something with her. I was tired after my relaxing day, so I went to bed early. I slept really well!*



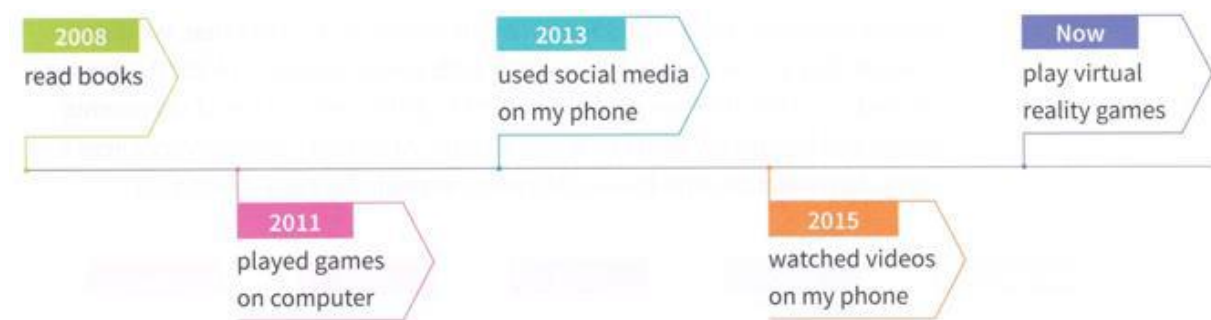
**A. Read the model paragraph and complete the timeline.**

When I was young, before 1990, I wrote letters to my friends. It was so exciting to see a letter for me in the mailbox! I also talked to my grandparents on the phone. The phone was attached to our house, so I could only talk to them when I was at home. After I got a computer in 1995, things changed. I emailed my friends and family. We didn't send letters anymore. We still talked on the phone, though. Then, in 2007, I got my first cell phone. After that, I didn't talk on the phone very much. Mostly I texted my friends and family. After 2010, I also shared photos and videos with them on social media. Now, I can see my friends when I talk to them on video calls.



**B. Read the timeline and write a paragraph. Remember to connect sentences with *before*, *before that*, *after*, *after that*, and *when*.**

Changes in how I spend my free time




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