

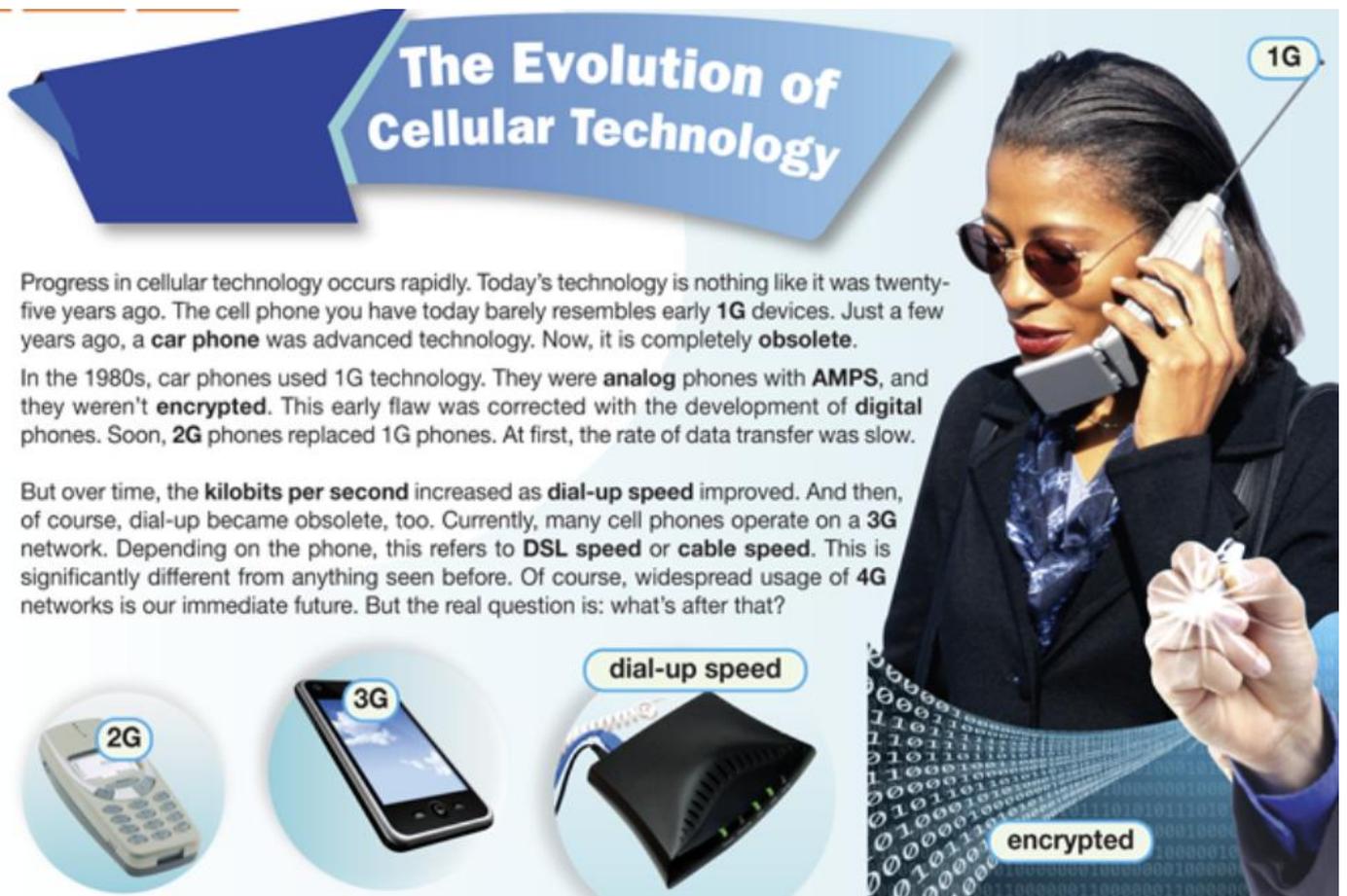
UNIT 7: Wireless communication. History of Cellular Technology.

GET READY!

Work in pairs. Read the sentences and decide if they are TRUE (T) or FALSE (F).

- 1) The first mobile phones were designed to be used inside cars.
- 2) Early cellular systems provided very high privacy levels.
- 3) The transition from analog to digital technology improved call quality.
- 4) Data speed in early networks was already very fast.
- 5) Modern cellular networks allow much faster data transfer than before.
- 6) 1G technology used digital systems.
- 7) 2G introduced encryption.
- 8) 3G phones only allow voice communication.
- 9) 4G technology supports multimedia and online gaming.
- 10) Each generation of cellular technology includes new features and improvements.

READING



The Evolution of Cellular Technology

Progress in cellular technology occurs rapidly. Today's technology is nothing like it was twenty-five years ago. The cell phone you have today barely resembles early **1G** devices. Just a few years ago, a **car phone** was advanced technology. Now, it is completely **obsolete**.

In the 1980s, car phones used 1G technology. They were **analog** phones with **AMPS**, and they weren't **encrypted**. This early flaw was corrected with the development of **digital** phones. Soon, **2G** phones replaced 1G phones. At first, the rate of data transfer was slow.

But over time, the **kilobits per second** increased as **dial-up speed** improved. And then, of course, dial-up became obsolete, too. Currently, many cell phones operate on a **3G** network. Depending on the phone, this refers to **DSL speed** or **cable speed**. This is significantly different from anything seen before. Of course, widespread usage of **4G** networks is our immediate future. But the real question is: what's after that?

1G

2G

3G

dial-up speed

encrypted

1. Read the text and decide if the sentences are TRUE (T) or FALSE (F).

- 1) Early car phones used a 2G network. _____
- 2) Encryption was developed to improve on AMPS. _____
- 3) Cable speed is an improvement upon dial-up speed. _____
- 4) Modern mobile phones are very similar to early 1G devices. _____
- 5) At first, data transfer was fast in 2G networks. _____
- 6) Dial-up technology is still widely used today. _____
- 7) 3G networks can offer speeds similar to DSL or cable. _____
- 8) 4G networks are expected to be used more in the near future. _____

2. Match each word with its correct meaning (A–P)

- | | |
|------------------------|--|
| 1. 3G | A) A system of connected devices or computers |
| 2. DSL speed | B) No longer used because something better exists |
| 3. cable speed | C) A problem or weakness in something |
| 4. obsolete | D) To take the place of something |
| 5. 1G | E) The speed at which something happens |
| 6. analog | F) A type of slow internet connection used in the past |
| 7. AMPS | G) To be similar to something |
| 8. kilobits per second | H) Existing or happening in many places |
| 9. resembles | I) A unit used to measure data transfer speed |
| 10. flaw | J) A first-generation mobile technology using analog signals |
| 11. replace | K) A technology used in early mobile phones without encryption |
| 12. rate | L) A system that uses continuous signals instead of digital ones |
| 13. dial-up | M) A mobile network that offers internet speeds similar to DSL or cable |
| 14. network | N) The speed of data transfer through a telephone line |
| | O) The speed of data transfer through television infrastructure |
| | P) A modern mobile network used for faster data and internet services |

VOCABULARY

3. Fill in the blanks with the correct words or phrases:

digital · 2G · dial-up speed · encrypted · car phone · 4G

- 1) A(n) _____ device allows for private calls.
- 2) The woman's phone operated slowly because it used _____.
- 3) In the early days of cellular technology, the man installed a(n) _____ in his truck.
- 4) A(n) _____ phone only includes voice and limited data services.
- 5) A(n) _____ network is preferred over an analog network
- 6) _____ technology is much faster than 3G technology.

LISTENING

4. Listen and reply to the following question.

What are the benefits of encrypted devices? Use the words below to fill in the blanks.

transferred · advantageous · coded

An encrypted device is _____ and protected. It's _____ for cellular devices because it protects _____ information.

5. Listen to a conversation between a supervisor and a trainee. Choose the correct answers.

- 1) **What is the conversation mostly about?**
 - a. changes in cellular technology
 - b. the popularity of different cellular devices
 - c. how to operate a 3G phone
 - d. the difference between dial-up and cable speeds

- 2) **What is true about the woman's phone?**
 - a. It uses the newest type of technology available.
 - b. It operates on an analog system.
 - c. It transmits data at DSL speed.
 - d. It is faster than the man's phone.

6. Listen again and complete the conversation.

Supervisor: This week we're lowering the price on our older phones. We need to make room for the new 4G shipment.

Trainee: So my 3G phone won't work anymore?

Supervisor: It'll still work. The 3G network will be available for years to come. In fact, voice transmission is still operating on 2G technology.

Trainee: Wait, I thought 2G phones operated on 1) _____.

Supervisor: Nope, analog technology 2) _____ years ago.

Trainee: I thought 3) _____ to 3G. So, my phone uses a digital network too?

Supervisor: 4) _____, _____ exactly in the same way.

Trainee: What do you 5) _____?

Supervisor: Your phone transmits data at DSL speed. The new phones will 6) _____.

Trainee: I didn't realize how different all these phones were.

Supervisor: Cellular technology evolves so rapidly. It's hard to keep up with it sometimes.

Trainee: I see that now. I'm curious to see what'll happen next.

SPEAKING

USE LANGUAGE SUCH AS:

So soon?
I thought ...
What do you mean by that?

Student A: You are a supervisor. Talk to Student B about:

- a new shipment of cellular devices
- types of data transferring speed
- features of the new devices

Student B: You are a trainee. Talk to Student A about a new shipment of cellular devices.

7. Complete the conversation below using the given phrases. WRITE the sentences in the blank spaces. Then, take roles and act it out.

Phrases:

- Will these new devices use cable speed?
- I thought that was the fastest on the digital network.
- What do you mean by that?
- So soon? I was just getting used to the 3G technology.
- Wow, I'm curious to see what they'll do.

Conversation:

Student A: This week we're lowering the price on our older phones. We need to make room for the new 4G shipment.

Student B: _____

A: Yes. New advancements come out all the time.

B: _____

A: Nope. The kilobits per second will be much faster than that.

B: _____

A: Yes, but not for long.

B: _____

A: Cellular technology evolves very rapidly. The 4G devices will exceed cable speed.

B: _____