

## UNIT 8

# COMPUTER ETHICS



### Connect to the topic

1. Look at the photo.  
What types of information might people in the photo be working with?
2. How does this photo relate to issues like data privacy and security?
3. How might a data breach affect the trust and reputation of the organizations involved?
4. How would you define computer ethics, and why is it important in the digital age?

### WARM-UP VIDEO

**WATCH AND SPECULATE.** Watch the video “10 Commandments of Computer Ethics” and discuss the questions below.

1. How can computers be used to harm others?
2. Why is it wrong to look at someone's computer files without asking?
3. How can computers be used for theft or fraud?
4. How can computers be used to spread misinformation or false information?
5. Why is it important to pay for computer programs?
6. What should we do if we want to use something someone else made?



## UNIT 8.1 DEEPPAKES

### SPEAKING

**Task 1. COLLABORATE.** Work in small groups. Look at this questionnaire about what you, and people you know, did, or do, about deepfakes. Tick the appropriate boxes. Then answer the questions below.

You	A friend	Someone in your family	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	have seen a deepfake video
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	have shared a deepfake video
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	have believed a deepfake was real
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	have created a deepfake
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	have had their voice manipulated

1. In what ways can deepfakes be harmful?
2. Are there any positive uses for deepfakes?
3. How can you verify if a video or audio clip is genuine?

**Task 2. COMMUNICATE.** Read the following news and discuss the questions below in pairs.

A viral deepfake video of a well-known politician is circulating on social media, causing widespread confusion and panic. The video shows the politician saying something inflammatory, but it was later revealed to be a deepfake created with advanced AI technology. Authorities are investigating the source of the video, but the damage to the politician's reputation is already done.

1. Why do you think someone would create a deepfake like this?
2. How might the deepfake affect the politician's career?
3. What steps could the politician take to clear their name?
4. How should social media platforms respond to the spread of deepfakes?

Now read the responses from two characters involved in the deepfake incident and answer the questions below.

#### The Politician's View

I was shocked to see the deepfake circulating online. It was alarming to realize that people could create such realistic videos to damage my reputation. I've worked hard to build my career, and it's disheartening to see my image manipulated this way. I hope social media platforms take action to remove this harmful content and that the authorities find those responsible for creating it.

#### The Creator's View

It was all a joke! I didn't think it would cause this much trouble. I made the deepfake to amuse my friends, but it spread like wildfire. I understand it was wrong, but I didn't expect it to go this far. I'm sorry for any harm caused, and I promise I won't do it again.

1. Why was the politician shocked by the deepfake?
2. What does the creator think about the impact of their deepfake?
3. What steps should the creator take to make excuses?
4. What should happen to someone who creates harmful deepfakes?

**Task 3. COMMUNICATE.** Discuss these situations in pairs.

1. A friend sends you a deepfake video that looks real. What should you do to verify its authenticity? Discuss your approach.
2. A popular movie star is accused of misconduct based on a deepfake video. How should the media handle such situations? Should they report on it or wait for confirmation?

3. Your university is considering a program to educate students about deepfakes. What topics should be included, and how can you raise awareness about the risks of deepfakes?

### READING AND VOCABULARY

**Task 4. READ FOR MAIN IDEA.** You're going to read an article about deepfake technology. First skim-read it quickly to get a general idea of the content and the organization. Which of these topics is not mentioned in the article?

- A. The impact of deepfake technology on public trust in media.
- B. The process of creating deepfake videos.
- C. The role of artificial intelligence in creating deepfake videos.
- D. The use of deepfake technology in state-aligned disinformation campaigns.
- E. The legal and ethical challenges of regulating deepfake technology.

**Task 5. READ FOR DETAILS.** These sentences have been removed from the article. Read the article again and match each sentence with a numbered gap.

- A. The A.I. software is sometimes used to **distort** public figures.
- B. But something was off.
- C. It appeared intended to promote the interests of the Chinese Communist Party and undercut the United States for English-speaking viewers.
- D. Those predictions have now become reality.
- E. They are computer-generated avatars created by artificial intelligence software.

### The People Onscreen Are Fake

In one video, a **news anchor** with perfectly combed dark hair and a stubbly beard outlined what he saw as the United States' shameful lack of action against gun violence. In another video, a female news anchor told about China's role in geopolitical relations at an international summit meeting. 1) \_\_\_\_\_. Their voices were **stilted** and failed to sync with the movement of their mouths. Their faces had a **pixelated**, video-game quality and their hair appeared unnaturally plastered to the head. The **captions** were filled with grammatical mistakes.

The two broadcasters, anchors for a news outlet called Wolf News, are not real people. 2) \_\_\_\_\_. And late last year, videos of them were distributed by pro-China bot, in the first known instance of deepfake video technology being used to create **fictitious** people as part of a state-aligned information campaign.

"This is the first time we've seen this in the wild," said Jack Stubbs, the vice president of intelligence at Graphika, a research firm that studies disinformation. Graphika discovered the pro-China campaign. 3) \_\_\_\_\_.

Deepfake technology, which has progressed steadily for nearly a decade, has the ability to create talking digital puppets. 4) \_\_\_\_\_. But the software can also create characters **out of whole cloth**, going beyond traditional editing software and expensive special effects tools used by Hollywood, blurring the line between fact and fiction to an extraordinary degree.

With few laws to manage the spread of the technology, disinformation experts have long warned that deepfake videos could further **sever** people's ability to **discern** reality from **forgeries** online, potentially being misused to set off unrest or incept a political scandal. 5) \_\_\_\_\_.

(adapted from <https://www.nytimes.com/2023/02/07/technology/artificial-intelligence-training-deepfake.html>)

**Task 6. WORK WITH WORDS.** Match each **highlighted** word from the article with its meaning.

1. <b>distort</b>	a) unnatural and awkward
2. <b>news anchor</b>	b) a text describing an image or video
3. <b>stilted</b>	c) to recognize or notice
4. <b>pixelated</b>	d) to twist or change something
5. <b>caption</b>	e) made-up; not real

6. <b>fictitious</b>	f) to cut off
7. <b>out of whole cloth</b>	g) TV news presenter
8. <b>sever</b>	h) fake document or signature
9. <b>discern</b>	i) entirely fabricated or invented out of nothing
10. <b>forgery</b>	j) appearing blocky or blurry

**Task 7. WORK WITH WORDS.** Fill in the words from the previous exercise in the sentences below.

- The \_\_\_\_\_ introduced the evening news with a report on the latest political scandals.
- The story about the talking animals is entirely \_\_\_\_\_.
- The low-resolution image was \_\_\_\_\_, making it hard to see the details.
- The signature on the check was a \_\_\_\_\_, and the bank refused to process it.
- The conversation felt \_\_\_\_\_ and uncomfortable, lacking natural flow.
- It was hard to \_\_\_\_\_ the truth from the many conflicting reports.
- They decided to \_\_\_\_\_ ties with the old supplier after the contract expired.
- The photograph of the historic building had a \_\_\_\_\_ explaining its significance.
- The rumors about his secret life were made up \_\_\_\_\_.
- The lens can \_\_\_\_\_ the image, making objects look bigger than they are.

**Task 8. WORK WITH WORDS.** Read the passage below about deepfakes and their impact. Circle the correct word in each pair of options. Each pair has one word that fits best in the context of the sentence.

Deepfake technology is a powerful tool that can create highly realistic and convincing 1) **videos** / **videoes** by manipulating images or footage. A recent report highlighted the increasing use of deepfakes in 2) **entertainment** / **entertaining**, social media, and 3) **cybercrime** / **cyber criminal** activities. Researchers at a major tech institute 4) **having** / **have** expressed concern about the potential 5) **misuses** / **misuse** of this technology, particularly in creating misleading content.

Deepfakes are made using artificial intelligence 6) **tools** / **toys** that analyze and learn from real videos to generate fake 7) **but** / **or** convincing content. This technology 8) **allows** / **allowing** users to create videos where people appear to say or do things they 9) **did** / **did not** actually do. The implications for 10) **privacy** / **private** and misinformation are 11) **signify** / **significant**.

For instance, deepfakes can be used to spread 12) **false** / **falsify** information or impersonate individuals in a 13) **convinced** / **convincing** manner. This has led to 14) **increases** / **increasing** concerns about how to regulate and manage the use of deepfakes. In the entertainment industry, deepfakes have been used to create 15) **realistic** / **reality** visual effects in movies, but their 16) **uses** / **users** in creating fake news and 17) **fraudsters** / **fraud** have raised ethical questions.

Experts warn that without proper controls, deepfakes could be used to damage reputations, 18) **manipulate** / **manipulate by** public opinion, and even interfere with elections. Measures are being considered to 19) **modify** / **monitor** and limit the spread of harmful deepfake content online. It's important to educate the public on how to identify and protect against deepfakes to prevent their 20) **harmless** / **harmful** effects.

## WATCHING

**Task 9. EXPLORE THE WORDS.** Complete the definitions with the phrases below.

- |                               |                            |                          |
|-------------------------------|----------------------------|--------------------------|
| a) great or large             | b) not fake                | c) not authentic         |
| d) to be someone else         | e) to exceed limits        | f) one thing for another |
| g) through fraudulent schemes | h) in a straight line      | i) lacking consent       |
|                               | j) a faint duplicate image |                          |

1. **genuine** (adj): real or authentic; \_\_\_\_\_ or counterfeit.
2. **impersonation** (n): the act of pretending \_\_\_\_\_, usually to deceive others.
3. **swap** (v): to exchange \_\_\_\_\_, often of similar value or type.
4. **align** (v): to arrange or position things \_\_\_\_\_.
5. **staggering** (adj): astonishingly \_\_\_\_\_; overwhelming in magnitude.
6. **non-consensual** (adj): not agreed to or approved by all parties involved; \_\_\_\_\_.
7. **transgress** (v): to violate a law, rule, or boundary; \_\_\_\_\_.
8. **scammer** (n): a person who deceives or tricks others \_\_\_\_\_.
9. **bogus** (adj): fake or counterfeit; \_\_\_\_\_.
10. **ghosting** (n): a visual artifact characterized by \_\_\_\_\_ alongside the original.

**Task 10. WATCH FOR DETAILS.** Scan the QR code and watch the video “What are deepfakes and why are they dangerous?” Then choose the correct answers to the questions.



1. What is the main focus of the video?
  - A. Jennifer Lopez's new album
  - B. The dangers of deepfakes
  - C. The history of deepfakes
  - D. The process of making viral videos
2. How are deepfakes created?
  - A. By manipulating images manually
  - B. By using complex algorithms and machine learning
  - C. By hiring professional actors
  - D. By using special effects in filming
3. What is one of the dangers associated with deep fakes?
  - A. They can improve mental health
  - B. They can create a climate of doubt about what is real
  - C. They can only be used for harmless creative purposes
  - D. They can help identify criminals
4. How can deepfakes affect financial transactions?
  - A. They can ruin the security of online banking
  - B. They can be used to deceive people into transferring money
  - C. They can be used to create virtual currency
  - D. They have no impact on financial transactions
5. What are some signs that a video might be a deepfake?
  - A. Differences in resolution and blurring around the ears or hairline
  - B. High-quality production value and professional editing
  - C. Lack of emotion displayed by people in the video
  - D. Long disclaimers at the beginning of the video
6. How are researchers and organizations working to combat the threat of deepfakes?
  - A. By creating more advanced deep fake technology
  - B. By ignoring the issue and hoping it goes away on its own
  - C. By developing automated software to detect and flag deep fakes
  - D. By promoting the use of deep fakes for entertainment purposes
7. What analogy does the speaker use to describe the ongoing battle against deep fakes?
  - A. A game of chess
  - B. A journey through time
  - C. A game of chance
  - D. A race between technology and security measures
8. What is the speaker's main message regarding deepfakes?
  - A. They are harmless and should be considered as a form of entertainment
  - B. They are a serious threat that requires proactive measures to fight

- C. They are just a passing fad and will soon lose popularity
- D. They are only a concern for celebrities and public figures, not the general public

## LISTENING

**Task 11. COMMUNICATE.** You are going to listen to a dialogue about deepfakes and their impact on the news. Before you start listening, discuss the following questions with your partner.

- Why are deepfakes a concern for the news media and journalism?
- What risks do deepfakes bring to society?
- What measures can be taken to reduce those risks?

**Task 12. LISTEN FOR DETAILS.** Scan the QR code and listen to the dialogue between Karen, a journalist, and Dr. Stevens, a media expert, about deepfakes, then answer the questions below.

1. Why are deepfakes considered dangerous?
2. What are some visual clues that could indicate a deepfake video?
3. What signs in audio might suggest a deepfake?
4. Are there any tools or technologies that can help identify deepfakes?
5. What legal consequences might someone face for creating or spreading deepfakes?
6. What should journalists do to protect themselves and their stories from deepfakes?



## SPEAKING

**Task 13. COMMUNICATE.** Work in groups of four. Role play the situation below. Talk about why your idea about deepfakes is the most important. Tell the others why their ideas might have problems. Then decide which idea is the least important and explain why.

### **Student A – Entertainment and Creativity**

You believe that deepfakes can be positive for entertainment and creativity. Tell the others three reasons why. Tell them what is wrong with their ideas. Also say why deepfakes in news might cause confusion, in politics might harm trust, and in personal use might invade privacy.

### **Student B – News and Journalism**

You believe that deepfakes are a major concern for news and journalism. Tell the others three reasons why. Tell them what is wrong with their ideas. Also say why deepfakes in entertainment might not be as serious, in politics might be controlled by laws, and in personal use might be less widespread.

### **Student C – Politics and Elections**

You believe that deepfakes are most dangerous for politics and elections. Tell the others three reasons why. Tell them what is wrong with their ideas. Also say why deepfakes in entertainment might be just for fun, in news might be spotted quickly, and in personal use might not affect many people.

### **Student D – Personal Use and Privacy**

You believe that deepfakes have serious impacts on personal use and privacy. Tell the others three reasons why. Tell them what is wrong with their ideas. Also say why deepfakes in entertainment might not be harmful, in news might be controlled by media guidelines, and in politics might be regulated by governments.

**Task 14. COMMUNICATE.** Work in pairs. One student (Reporter) will share a strange video news story he or she "saw," and the other student (Investigator) will investigate and try to prove if it was a deepfake. Take turns switching the roles.

**Reporter.** Read out the strange video news story you received. Describe the video as if you watched it, providing as many details as possible.



**Investigator.** Listen carefully and use critical thinking and to identify whether the news story could be a deepfake. You should ask questions to gather more details about unnatural facial expressions, inconsistent lighting, unusual background, voice irregularities, synchronization of the voice with the mouth movements etc. Argue why you believe it is a deepfake or not. After discussing the news stories in pairs share your conclusions to the class.

### News Story 1

Emma Stone was in a video announcing that she is quitting acting to become a beekeeper. In the video, she showed her new bee farm and explained her plans to move to the countryside. She was wearing a beekeeper suit and talking about how passionate she is about protecting bees.

### News Story 2

Ed Sheeran appeared in a video at his concert, releasing a group of exotic animals like lions and tigers into the wild. He talked about how he was giving them their freedom as part of his new animal rights campaign, and the video showed the animals running off into a forest

### News Story 3

Dr. Laura Simmons, a well-known astrophysicist, was in a video describing her meeting with aliens. The video included her showing a small, glowing device she claimed was alien technology and footage of a spaceship hovering above her house.

### News Story 4

A video showed meteorologist Carla Young controlling the weather using a mysterious device. She was seen pointing the device at the sky, causing it to start raining or snowing instantly. The video included footage of her changing the weather multiple times in different locations.

### News Story 5

Celebrity chef Gordon Ramsay was in a video making a dish with glowing blue fruits and vegetables. He claimed these were new super foods that could boost energy and make you glow in the dark. The video showed him preparing the dish and serving it to his guests, who started glowing.

### News Story 6

A video featured the British Royal Family performing a choreographed dance routine at Buckingham Palace. King Charles, Prince William, and other members were seen dancing to a pop song in the palace gardens.

## LANGUAGE FOCUS

**Task 15. STUDY AND ANALYZE.** Look at the first part of the rule about passive voice, study in what situations it is used.

### PASSIVE VOICE 1

**be in the right form + past participle**

Form	Active	Passive
Present Simple	Researchers develop artificial intelligence algorithms.	Artificial intelligence algorithms <b>are developed</b> by researchers.
Past Simple	Hackers breached the security system last week.	The security system <b>was breached</b> by hackers last week.
Future Simple	The company will launch a new antivirus software.	A new antivirus software <b>will be launched</b> by the company.

**Task 16. PRACTICE.** Complete the sentences using the correct passive form of the verbs in brackets.

1. Ethical guidelines \_\_\_\_\_ (follow) by companies in all their operations.
2. A deep fake of the CEO \_\_\_\_\_ (generate) by a malicious actor last week bringing chaos to the company.
3. The software update \_\_\_\_\_ (release) by the team next month.
4. Ethical practices \_\_\_\_\_ (adopt) by the organization in the coming year.
5. Cybersecurity threats \_\_\_\_\_ (analyze) daily by researchers.
6. Ethical standards \_\_\_\_\_ (violate) by the team in their project when they intentionally manipulated data to misrepresent the product's performance.
7. Advanced deep fake detection tools \_\_\_\_\_ (develop) soon by cybersecurity experts to protect the integrity of digital media.
8. The new data center \_\_\_\_\_ (design) by engineers last year.
9. Convincing deep fake videos \_\_\_\_\_ (create) through a combination of sophisticated machine learning algorithms and powerful computing resources.
10. The software \_\_\_\_\_ (update) regularly by programmers.

**Task 17. PRACTICE.** Read the text and use the correct passive form of the verbs in brackets.

In the tranquil suburban town of Greenwood, a deepfake scandal 1) \_\_\_\_\_ (reveal) , leaving its residents in disbelief. The town's mayor, Margaret Thomas, had become the unsuspecting victim of a plot. Her image and voice 2) \_\_\_\_\_ (manipulate) to deliver a fake video message in which she declared an increase in property taxes, alarming the entire community. The previously thought-to-be impenetrable security system 3) \_\_\_\_\_ (breach) by the hackers behind this crime, leading to widespread shock and disbelief. According to experts deepfake algorithms 4) \_\_\_\_\_ (use) with malicious intent, and steps had to be taken to counteract this arisen problem.

To combat the threat of deepfake impersonations, a new antivirus software 5) \_\_\_\_\_ (launch) soon by the company responsible for cybersecurity in the town. Residents are hopeful that this development will prevent further malicious attempts. The whole town is anxiously awaiting the release of this innovative solution.

**Task 18. PRACTICE.** Answer the questions using your own ideas.

1. What can be done to secure sensitive data on a computer?  
Sensitive data on a computer ....
2. How are software updates usually applied to a computer system?  
Software updates ...
3. Where are cybersecurity breaches reported?  
Cybersecurity breaches ...
4. How are passwords often stored for online accounts?  
Passwords for online accounts ...
5. What is used to track online activities for personalized advertisements?  
Online activities ...
6. How is digital piracy typically prevented by content providers?  
Digital piracy ...
7. Where are sensitive customer data and financial records stored by organizations?  
Sensitive customer data and financial records ...
8. What is typically installed on a computer for protection against viruses and malware?  
Antivirus software ...



## UNIT 8.2 DATA PRIVACY AND SURVEILLANCE ETHICS

### READING AND VOCABULARY

**Task 19. EXPLORE THE WORDS.** Read this short introduction to data privacy and surveillance ethics and find words which match the meanings below.

Data privacy is the concept of safeguarding personal information from unauthorized access or misuse. With the rise of digital technologies, data privacy has become a significant concern, especially with the growing use of surveillance and data collection by corporations and governments. Surveillance can take many forms, such as video cameras, online tracking, and geolocation data. Surveillance ethics refers to the moral considerations of collecting, storing, and using personal data. It addresses questions about the balance between security and privacy, the right to be forgotten, and the potential for abuse by authorities or businesses.

1. \_\_\_\_\_ protecting something from harm or damage.
2. \_\_\_\_\_ improper use of something.
3. \_\_\_\_\_ a feeling of worry or interest about something important.
4. \_\_\_\_\_ the process of monitoring user activity on the internet.
5. \_\_\_\_\_ information about a person's or device's physical location.
6. \_\_\_\_\_ treating someone with cruelty or violence using power or authority.

**Task 20. COLLABORATE.** Work in pairs. Choose the best number to complete the sentences about data privacy and surveillance ethics. Discuss with a partner your point of view. Check the answers with your teacher.

1. According to a survey, **40%** / **60%** / **80%** of people are concerned about data privacy when using social media.
2. Over the last decade, data breaches have increased by **45%** / **70%** / **85%**.
3. Surveillance cameras have become common in **25%** / **50%** / **75%** of major cities around the world.
4. The average user has their online behavior tracked by **30** / **50** / **70** third-party trackers on popular websites.
5. A typical user agrees to **15** / **35** / **60** privacy policies in a year without reading them.

Which fact surprises you the most? Explain your answer.

**Task 21. EXPLORE THE WORDS.** Complete the following definitions.

- |                            |                       |                                 |
|----------------------------|-----------------------|---------------------------------|
| a) personal information    | b) unreadable format  | c) name or financial details    |
| d) interactions of users   | e) identifies people  | f) about practices and policies |
| g) at the cost of security | h) designed to damage | i) monitoring or supervising    |

1. **online behaviour** (phr): the activities and \_\_\_\_\_ on the internet.
2. **identity theft** (phr): the illegal use of someone else's personal information, such as \_\_\_\_\_.
3. **oversight** (n): the act of \_\_\_\_\_ an activity to ensure it is done correctly.
4. **privacy policies** (phr): documents explaining how \_\_\_\_\_ is collected and used.
5. **transparency** (n): the quality of being open and clear \_\_\_\_\_.
6. **encryption** (n): converting data into a secure, \_\_\_\_\_ to prevent unauthorized access.
7. **convenience** (n) : the quality of being easy or accessible, sometimes \_\_\_\_\_ or privacy.
8. **facial recognition** (phr): a technology that \_\_\_\_\_ based on their facial features.
9. **malware** (n): harmful software \_\_\_\_\_ or infiltrate computer systems.

**Task 22. READ FOR DETAILS.** Work in A/B/C groups. You will each read a text about a different aspect of data privacy and surveillance ethics.

- First, look through your information and use three of the items from the word box to complete the text. Then prepare a mini presentation about your information for the other students in your group, including the underlined items in the text. You will need to cover your information and remember what to say, using your own words.
- Listen to the other two presentations and ask questions.
- Read through the other two texts and add the missing words.

online behaviour • identity theft • oversight • privacy •  
 policies • transparency • encryption • convenience •  
 facial recognition • malware

## Group A

### Data Breaches and Security

Data breaches occur when unauthorized individuals gain access to sensitive information. This can happen through hacking, 1) \_\_\_\_\_, or weak security practices. Data breaches can lead to the loss of personal information, 2) \_\_\_\_\_, or financial fraud. Security measures like 3) \_\_\_\_\_, firewalls, and multi-factor authentication can reduce the risk of data breaches. However, these measures are not foolproof, and companies must remain watchful in monitoring and updating their security systems. Breaches also raise ethical questions about who is responsible for protecting data and how organizations should respond when a breach occurs.

## Group B

### Surveillance Technologies

Surveillance technologies are tools used to monitor or track people and their activities. They include video cameras, 1) \_\_\_\_\_ software, and online tracking systems. While surveillance can help improve public safety and prevent crime, it also poses significant ethical challenges. Overuse of surveillance can lead to a lack of privacy, discrimination, or unauthorized use of collected data. Ethical surveillance requires 2) \_\_\_\_\_, accountability, and respect for individuals' rights. Proper 3) \_\_\_\_\_ and regulation are needed to ensure surveillance technologies are used responsibly and ethically.

## Group C

### Privacy and Personal Data

Privacy is the right to keep personal information secure and free from unauthorized access. Personal data includes names, addresses, phone numbers, financial information, and 1) \_\_\_\_\_. Maintaining privacy requires both individual and organizational responsibility. Individuals should be aware of 2) \_\_\_\_\_ and take steps to protect their information, while organizations must follow strict data protection laws and respect users' privacy rights. The growing use of technology and data collection has led to a debate about the balance between 3) \_\_\_\_\_ and privacy, with many people advocating for stronger data privacy regulations.

**Task 23. COLLABORATE.** Work in pairs or small groups to match each piece of advice about surveillance ethics and data privacy to one or more of the situations you read about in texts A-C.

1. Encrypt sensitive data to protect against unauthorized access or data breaches.
2. Use multi-factor authentication to increase data security.
3. Be cautious about sharing personal information online or with third parties.
4. Ensure there is clear oversight and accountability.
5. Use VPNs and other security tools to maintain online privacy.
6. Report any data breaches or unauthorized access to the appropriate authorities.
7. Be transparent about surveillance practices and inform individuals about data collection.

8. Ensure privacy policies are clear, understandable, and easy to access.

Think of at least one more piece of advice for each situation. Use vocabulary from the lesson.

**Task 24. READ FOR DETAILS.** Arrange the events in chronological order to reconstruct the timeline of the facial recognition system's implementation in Moscow.

### Implementation of the facial recognition system in Moscow

<b>2001</b>	Scaling of the "Safe City".
<b>2005</b>	Cameras are connected to video surveillance points.
<b>2010</b>	Automatic facial recognition system implemented in all Moscow cameras belonging to government agencies.
<b>2011</b>	The launch of the "Safe City" programme was announced.
<b>2012</b>	The launch of the first facial recognition system in the Moscow metro.
<b>2014</b>	In Moscow alone there are more than 205 thousand cameras operating today. The second place in the number of cameras is occupied by the Moscow region (over 80 thousand), followed by St. Petersburg (67 thousand) and Tatarstan (32 thousand). The most "blind" region is Chukotka (15 cameras).
<b>2015</b>	The beginning of cooperation between the Moscow Department of Information Technologies and NtechLab, which was engaged in the development of a facial recognition system. Other systems also used in Moscow include Tevian FaceSDK, VisionLabs Luna Platform and Kipod.
<b>2017</b>	Anti-terrorist security measures are being developed for the 2018 FIFA World Cup. Cameras are installed throughout the city, software complexes and unified data storage and processing centre with remote access to cameras and archives in real time are created.
<b>2018</b>	The official start of Moscow's five-year experiment in mass adoption of artificial intelligence, although citywide AI adoption likely began as early as 2019. In 2020, the system was used to track violations of restrictive measures during the COVID-19 pandemic.
<b>2020</b>	Testing of the facial recognition system at the FIFA World Cup.
<b>2021</b>	Black and white cameras are installed in residential buildings and public places.
<b>2024</b>	The Department of Information Technologies of Moscow is created, Sergei Sobyanin becomes mayor of Moscow – it was with his arrival that the process of digitalization of Moscow began.

**Task 25. COMMUNICATE.** Divide into two teams to have a debate about surveillance.

Some people think it's a good idea to use cameras and other tools to keep everyone safe, while others don't agree. Using these tools might help stop bad things from happening, but it could also mean people's privacy and freedom are at risk. What do you think?

### Should surveillance technologies be used for public safety?

YES	NO
1. Using cameras and other tools to keep everyone safe is important. It can help stop bad things from happening and make sure everyone is protected.  2.	1. It might take away their privacy and freedom, and it might not be fair, especially to people who are already treated unfairly.  2.

**Task 26. EXPLORE THE IDIOMS.** Study the meaning and examples of IT related idioms. Then use them in sentences.

**Push the envelope** - to exceed the current limits or boundaries, especially in technology or innovation.

*The designer **pushed the envelope** with an extraordinary user interface.*

**Digital divide** – the gap between those who have access to digital technologies and those who do not.

*In rural areas, the **digital divide** is evident, with many residents lacking access to high-speed internet and modern technology.*

**Patch things up** – to resolve conflicts or repair relationships, especially in the context of fixing software bugs or vulnerabilities.

*After the cyberattack, the company worked really hard to **patch things up** by making their network stronger and checking their security closely.*

**Back to square one** – returning to the beginning or starting over.

*The computer project had some problems, so the team had to go **back to the square one** and redo the whole system.*

**Open the floodgates** – to release a large volume of data, information, or content, often resulting in overwhelming or inundating consequences.

*The leak of sensitive information **opened the floodgates**, flooding the internet with private data.*

**Fly under the radar** – to operate discreetly, especially to avoid detection.

*The hacker group **flew under the radar** for months, stealing data without raising suspicion.*

**Turn a blind eye** – to ignore something, especially wrongdoing or unethical behavior.

*Despite warnings from cybersecurity experts, the company **turned a blind eye** to the vulnerabilities in their system, prioritizing profits over security.*

1. The publication of the research findings \_\_\_\_\_ of public debates about the ethical implications of AI technology.
2. Despite clear evidence of copyright infringement, the company \_\_\_\_\_, choosing to ignore the unethical behavior.
3. The malware went undetected for weeks; it \_\_\_\_\_ of even the most sophisticated cybersecurity systems.
4. Despite weeks of negotiations, the data privacy law was turned down by the senate sending the lawmakers \_\_\_\_\_ to write a new bill.
5. Despite their differences, the two colleagues managed to \_\_\_\_\_ and collaborate effectively on the project.
6. As a designer, I always try to \_\_\_\_\_ and create innovative designs that challenge conventional ideas.
7. The \_\_\_\_\_ became obvious during the pandemic, when students from low-income families didn't have access to online classes because of poor internet connections.

**Task 27. COLLABORATE.** Work in pairs. Explore the consequences of the digital divide in a futuristic society where access to advanced technology determines social status and privilege.

**Task 28. WRITE.** Write a story about a new virtual reality game release that opened the floodgates to a global obsession, blurring the lines between reality and fantasy. Use the idioms above.

## LISTENING

**Task 29. LISTEN FOR DETAILS.** Scan the QR code and listen to people talking about surveillance. Complete the table.



	Alan	Maria	Ryan
1. Where do they work?			
2. What was the purpose of surveillance?			
3. What incident did they talk about?			
4. How did the surveillance help?			
5. What was the result of the incident?			

**Task 30. COMMUNICATE.** Work in pairs. Discuss the questions below.

1. What are the primary reasons for using surveillance in the workplace?
2. What types of surveillance are most commonly used in workplaces?
3. How does workplace surveillance impact employee privacy and morale?

## SPEAKING

**Task 31. COMMUNICATE.** Work in pairs. Read about what different people want and worry about regarding data privacy. Choose three points you agree with and one that you do not agree with and write them in the box provided at the bottom. Share your ideas with your partner.



Ryan: "I want to control who can see my personal information and keep it private."



Jake: "I'm excited about tools that alert me if my personal data is being used without my permission."



Emily: "I'd like to know what companies do with my data and how they keep it safe."



Mia: "I'd like to have simple guides on how to protect my data in different situations."



Max: "I'm focused on avoiding online scams and keeping my data secure from hackers."



Owen: "I prefer services that ask for my permission before using my data for anything."



Sophie: "I value knowing how to keep my data private when using public Wi-Fi or other shared networks."



Lily: "I want to easily manage my privacy settings on social media and other online platforms."

Three things I think are important for data privacy: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.  
One thing I think is not so important: \_\_\_\_\_.

**Task 32. COMMUNICATE.** Role play the following situation.

An incident has occurred at a tech company's headquarters, where a high-end server has gone missing from a company's data center. The server contained proprietary software and critical business applications, including customer databases, product designs, and financial records. The last recorded use of the server was during a scheduled maintenance window, but after a subsequent security audit, it was discovered that the server was missing. Its value lies not only in its monetary cost but also in the critical information stored on it. Surveillance cameras recorded the office during the time of the incident, but the footage is unclear, making it challenging to determine exactly what happened. The HR department is responsible for conducting the investigation to determine who, if anyone, is responsible for the missing equipment.

**Roles:**

<b>HR Representative</b>	Leads the investigation, asks questions, reviews surveillance footage, and gathers statements from employees.
<b>Employee 1 (Accused)</b>	An employee who was in the area during the time of the incident. They claim they had nothing to do with the missing equipment.
<b>Employee 2 (Witness)</b>	A colleague who was working nearby and might have seen something suspicious.
<b>Employee 3 (Union Representative)</b>	Represents the interests of the employees, ensuring the investigation is fair and does not violate workers' rights.

**Task 33. COLLABORATE.** Work in small teams. You are a team of investigators tasked with solving a suspected case of corporate espionage involving unauthorized access to a company's restricted areas, a security breach, and a missing laptop. Your job is to use the provided clues to determine the sequence of events, identify potential suspects, and establish their motives. The clues are enumerated and should be read one by one. Put them in a pile and take turns taking the card and speculating on the information you've read. Based on the clues, identify individuals who had access to the restricted area, who may have had a motive to commit the crime, or who displayed suspicious behavior. Use the clues to build a timeline of what likely happened leading up to and after the crime. Consider who might have been involved at each stage. Once you have a theory, prepare a brief report to present to the class.





<p><b>Clue 1</b> A security guard found a cloned employee badge on the floor of a restricted area. The badge belonged to Mark, a former IT manager who was recently let go due to budget cuts. It appears someone used the badge to access the building after hours.</p>	<p><b>Clue 5</b> Upon checking internal chat logs, IT found a conversation between Samantha and Richard discussing the recent layoffs. Richard mentioned feeling insecure about his job and hinted at finding a way to "make things right" if he lost his position.</p>
<p><b>Clue 2</b> The company's IT department detected an unauthorized login into the internal network late at night. The login used Samantha's credentials, but she insists she was at home. A security camera in the parking lot shows someone entering the building at the time of the login.</p>	<p><b>Clue 6</b> The security footage from the entrance shows a hooded figure wearing gloves, which could be why no fingerprints were found at the scene. However, the person's build and clothing style match Mark's known attire.</p>
<p><b>Clue 3</b> Richard, a senior software engineer, reported his laptop missing from his desk. His team was working on a critical project related to a new product launch. The project files were on the laptop, and no backups had been made.</p>	<p><b>Clue 7</b> IT department found a draft email in Richard's work account, unsent, where he wrote to a friend about a "big opportunity" that could "change his life." The email didn't specify what it was about, but the timing was the night before the unauthorized login.</p>
<p><b>Clue 4</b> IT security discovered an unauthorized external connection from the company network to an unfamiliar server located in a different country. The connection was active during the same time as the unauthorized login.</p>	<p><b>Clue 8</b> Forensic experts found a single fingerprint on the cloned badge, matching Samantha. However, Samantha claims she hasn't seen the badge before, suggesting it could have been planted to frame her.</p>

## LANGUAGE FOCUS

**Task 34. STUDY AND ANALYZE.** Look at the second part of the rule about passive voice, study in what situations it is used.

### PASSIVE VOICE 2

be (in the right form) + past participle

Form	Active	Passive
Present Continuous	The IT team is currently fixing the network issue.	The network issue <b>is</b> currently <b>being fixed</b> by the IT team.
Present Perfect	The company has recently updated its privacy policy.	The privacy policy <b>has</b> recently <b>been updated</b> by the company.
Past Continuous	The employees were discussing data protection measures.	Data protection measures <b>were being discussed</b> by the employees.
Past Perfect	The company had already implemented cybersecurity measures.	Cybersecurity measures <b>had</b> already <b>been implemented</b> by the company.
Be going to	The organization is going to launch a new surveillance program.	A new surveillance program <b>is going to be launched</b> by the organization.
Modals	They might introduce a new software update.	A new software update <b>might be introduced</b> .

	They must configure the security settings.	The security settings <b>must be configured</b> .
	We should send the reports about surveillance system installation.	The reports about surveillance system installation <b>should be sent</b> .
	We can tell Jane about the meeting time.	Jane <b>can be told</b> about the meeting time.

**Task 35. PRACTICE.** Circle the correct word or phrase.

1. A new software update **is developed / is being developed** now by our team to enhance system security.
2. The server maintenance must **be completed / have completed** before the end of the business day to avoid any disruptions to our online services.
3. A firewall had previously **being installed / been installed** by the company.
4. The system's vulnerabilities **were being / were** evaluated by the experts while the management was unaware of the potential risks.
5. The latest security patches have just **been / were** uploaded by our IT department to protect our systems from potential threats.
6. The new software is currently **been testing / being tested** by the team.
7. Cybersecurity might **be / been** discussed in the upcoming meeting.
8. The server was **being repaired / being repairing** by the engineers when a sudden power outage interrupted their work.
9. A new website is going to **being / be** launched by the company next month.
10. The network settings **had already been / has already being** configured by our IT specialist before the office relocated to the new building.

**Task 36. PRACTICE.** Complete each second sentence so that it has a similar meaning to the first sentence.

1. The company plans to launch a new cybersecurity initiative.  
A new cybersecurity initiative \_\_\_\_\_ by the company.
2. The programmers will develop a cutting-edge AI system.  
A cutting-edge AI system \_\_\_\_\_ the programmers.
3. The IT department have upgraded the network security protocols.  
The network security protocols \_\_\_\_\_ the IT department.
4. The team should fix the software bugs immediately.  
The software bugs \_\_\_\_\_ immediately.
5. Specialists must implement stronger password policies.  
Stronger password policies \_\_\_\_\_ specialists.
6. The IT department intends to audit the server logs.  
The server logs \_\_\_\_\_ by the IT department.
7. They will provide technical support during the event.  
Technical support \_\_\_\_\_ during the event.
8. Scientists discovered a critical vulnerability in the system.  
A critical vulnerability in the system \_\_\_\_\_ by scientists.
9. Companies manufacture computer components in this region.  
Computer components \_\_\_\_\_ in this region.
10. The researchers are investigating a potential security breach.  
A potential security breach \_\_\_\_\_ the researchers.

**Task 37. PRACTICE.** Read a dialogue and use the correct passive form of the verbs in brackets.

**Alex:** Have you heard about the new monitoring system that 1) \_\_\_\_\_ (implement) in the company?

**Nina:** Yes, I have. I heard that it 2) \_\_\_\_\_ (call) the Employee Productivity Monitoring System.

**Alex:** That's correct. It's part of the company's efforts to ensure that work 3) \_\_\_\_\_ (carry) out efficiently.

**Nina:** How does it work? I heard that it can track employees' computer usage.

**Alex:** That's right. Employees' computer activities 4) \_\_\_\_\_ (monitor) , and reports 5) \_\_\_\_\_ (generate).

**Nina:** So, the employees 6) \_\_\_\_\_ (can/monitor) without their knowledge?

**Alex:** Well, it's done in a way that employees should be aware of it. They 7) \_\_\_\_\_ (inform) about the monitoring policy.

**Nina:** What kind of information 8) \_\_\_\_\_ (collect)?

**Alex:** Data on which websites are accessed, how much time 9) \_\_\_\_\_ (spend) on each task, and which applications 10) \_\_\_\_\_ (use).

**Nina:** So, it's all about improving productivity?

**Alex:** Yes, it helps in identifying areas where improvements 11) \_\_\_\_\_ (can/make). For instance, excessive time spent on non-work-related websites 12) \_\_\_\_\_ (resolve).

**Nina:** I see. Are there any concerns or issues regarding the new system?

**Alex:** Some employees have raised concerns about privacy. The company is addressing these concerns and ensuring that data 13) \_\_\_\_\_ (store) securely.

**Nina:** That's important. We wouldn't want any data leaks.

**Alex:** Absolutely, the company is taking data security very seriously.

**Nina:** Well, I hope the new system proves to be beneficial for both the company and its employees.

**Alex:** We'll see how it goes.

## UNIT 8.3 INTELLECTUAL PROPERTY

### READING AND VOCABULARY

**Task 38. EXPLORE THE WORDS.** Match the words from the text you are going to read to their definitions.

1. <b>SME</b>	a) relating to gaining superiority or advantage
2. <b>intangible</b>	b) valuable property owned or controlled by a company
3. <b>asset</b>	c) unauthorized use of intellectual property rights
4. <b>collateral</b>	d) IP protection similar to patents, but with shorter terms and less strict
5. <b>utility model</b>	e) non-physical property like ideas or creative works
6. <b>competitive</b>	f) quality of being new or original
7. <b>mandatory</b>	g) small and medium enterprises, with limited revenues, assets, or employees
8. <b>novelty</b>	h) relating to the visual appearance of a product
9. <b>infringement</b>	i) required by law or regulation
10. <b>external</b>	j) property offered to secure a loan, including intellectual property

**Task 39. WORK WITH WORDS.** Continue the sentences below with your own ideas.

1. SMEs often rely on intellectual property to...
2. Intangible assets like patents and copyrights are...
3. Protecting assets in ICT means...
4. Using IP as collateral can...
5. Utility models offer a shorter option for...
6. In the ICT sector, being competitive often means...
7. Mandatory registering of IP is important because...
8. Novelty and inventiveness are essential criteria for...
9. Infringement of intellectual property rights can lead to...
10. External appearance protection is important for...

**Task 40. READ FOR MAIN IDEA.** Read the text and answer the questions below.

1. What is the main purpose of intellectual property rights discussed in the text?
2. What does the text highlight as valuable business assets?

### A Guide to Intellectual Property Rights

Although usually unnoticed, Intellectual Property Rights (IPRs) are all around us. From the handy design of a bottle of water or a lollipop, to the drying technology of sports clothing or the databases we use at work. Many of these products and services come from small and medium enterprises (SMEs), whose daily work often results in creative works, inventions and distinctive symbols capable of generating profits for their creators or inventors. For this reason, SMEs should regard IPRs as a key tool to compete.

The Intellectual Property system arises as an opportunity to turn those innovative ideas, creative designs and other intangible assets into valuable business assets, which can be transferred, licensed or used as collateral to obtain financing, as we will see thorough this guide.

Regardless of the sector, there are many IP tools that can be used in business daily activities:

- Patents and utility models, which protect inventions offering new technical solutions to a problem, are particularly relevant in research related sectors, such as biotechnology, nanotechnology, chemical and pharmaceutical industries.
- Industrial designs protect the aesthetic aspect of an article or its packaging, which can be a crucial factor in the purchase decision of furnishing, fashion, digital communication or food products.
- Trademarks can be used in any industry to protect business identity. Trademarks cover trade names, logos, symbols, slogans or even the shape and packaging of products.

- Copyright protects artistic, literary and scientific works. Software and other visual works, such as videos or photographs are also protected by copyright.
- A Trade secret is any valuable business information that provides a competitive advantage, e.g. clients' list, processes, formulas.

	Registration	Scope	Actions against third parties' rights	Actions against infringers
<b>Patents</b>	Mandatory	Inventions: technical solutions (products, processes or uses)	Oppose/cancel third parties applications or registrations based on lack of novelty or inventiveness	Civil/ criminal actions against use or commercialization of the invention
<b>Trademarks</b>	Mandatory	Brands, signs used to distinguish commercial origin	Oppose/ cancel third parties applications or registrations based on likelihood of confusion – similarities between signs and goods/services	Civil/ criminal actions against exploitation of identical or confusingly similar signs
<b>Industrial Designs</b>	Mandatory	External appearance of a product	Oppose/cancel third parties applications or registrations based on lack of novelty	Civil/ criminal actions against use or commercialization
<b>Copyright</b>	Not mandatory, advisable	Scientific, artistic and literary works	Originality of the work can be challenged in the framework of infringement proceedings	Civil/ criminal actions against unauthorized reproduction, distribution, communication to the public

ICT products are knowledge intensive and often require the combination of different technologies to operate. Let's consider an example of launching a new smartphone. It involves the implementation of different technologies and creative works in the same product. All these elements most likely, require different Intellectual Property Rights to ensure full and adequate protection of your product.

IPRs may protect its special characteristics in the following way:

- *Developed technologies* (e.g. new flexible material for screen manufacturing or data downloading technologies): these inventions can be protected through patents, utility models or trade secrets.
- *Phone new look*: the new external appearance of the phone may be protected by industrial design.
- *Company's logos*: any distinctive sign capable of identifying the business' origin of the product can be registered as a trademark. Nokia ring tune and Nokia Connecting People, are examples of non-traditional trademarks registrations.
- *Special packaging*: shape, colour combinations, texture and graphics included on the product's box can be protected by trademarks or designs.

(adapted from [https://intellectual-property-helpdesk.ec.europa.eu/system/files/2021-01/fs\\_what\\_can\\_ip\\_do\\_for\\_my\\_business.pdf](https://intellectual-property-helpdesk.ec.europa.eu/system/files/2021-01/fs_what_can_ip_do_for_my_business.pdf))

**Task 41. READ FOR DETAILS.** Read the text again and choose the correct answer to the questions.

1. Which Intellectual Property Right is typically associated with protecting inventions that offer new technical solutions?
  - A. Industrial designs
  - B. Trademarks
  - C. Patents
  - D. Copyright
2. Which Intellectual Property Right is most commonly used to protect a company's logo or slogan?
  - A. Copyright
  - B. Trade secrets
  - C. Trademarks
  - D. Industrial designs
3. Why might a trade secret be valuable to a business?
  - A. It is publicly disclosed information
  - B. It provides a competitive advantage through confidential information
  - C. It is protected by mandatory registration
  - D. It can be used as collateral for loans
4. What aspect of a new smartphone might be protected by industrial design?
  - A. Its special technologies
  - B. Its external appearance
  - C. Its software applications
  - D. Its data processing methods
5. Which Intellectual Property Right protects artistic, literary, and scientific works, including software?
  - A. Trademarks
  - B. Patents
  - C. Industrial designs
  - D. Copyright
6. What role does Intellectual Property play in product launches, like that of a new smartphone?
  - A. It helps secure government funding
  - B. It ensures that all aspects of the product are adequately protected
  - C. It guarantees market success
  - D. It simplifies the production process

**Task 42. WORK WITH WORDS.** Read the text and fill in the gaps with the correct words.

### **Patents in Google**

Google invests heavily to create new and groundbreaking technologies across various domains, including search 1) \_\_\_\_\_, artificial intelligence, cloud computing, and mobile devices. These innovations often result in 2) \_\_\_\_\_ software algorithms, hardware designs, and user interfaces that improve the user experience and solve complex problems.

When Google invents a new technology or develops a unique solution to a technical problem, it seeks to protect its intellectual property by 3) \_\_\_\_\_ for patents with relevant patent offices around the world. Google's patent filings cover a wide range of inventions, including algorithms for 4) \_\_\_\_\_ search results, data processing techniques, machine learning models, and hardware 5) \_\_\_\_\_ for smartphones and data centers.

By getting patents for its inventions, Google gains exclusive rights to use, license, or enforce its intellectual property against 6) \_\_\_\_\_. Patents provide Google with legal protection against 7) \_\_\_\_\_, allowing the company to prevent others from using or selling its patented technologies without 8) \_\_\_\_\_. This exclusivity gives Google a competitive 9)

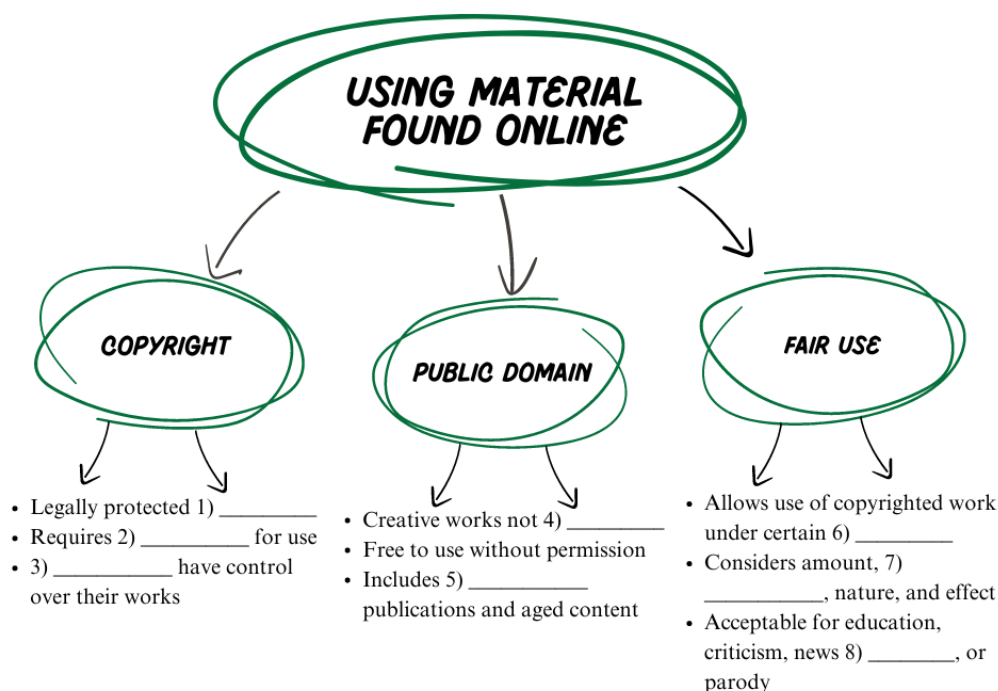


\_\_\_\_\_ in the marketplace and incentivizes innovation and investment in 10) \_\_\_\_\_ and development.

- |                      |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| 1. A) machines       | B) platforms    | C) mechanisms   | D) engines      |
| 2. A) novel          | B) outdated     | C) traditional  | D) obsolete     |
| 3. A) posting        | B) filing       | C) announcing   | D) documenting  |
| 4. A) evaluating     | B) ranking      | C) prioritizing | D) categorizing |
| 5. A) changes        | B) replacements | C) innovations  | D) repairs      |
| 6. A) opponents      | B) candidates   | C) applicants   | D) competitors  |
| 7. A) infringement   | B) forgery      | C) fraud        | D) theft        |
| 8. A) permission     | B) prohibition  | C) sanction     | D) solution     |
| 9. A) disadvantage   | B) obstacle     | C) edge         | D) speed        |
| 10. A) investigation | B) examination  | C) research     | D) exploration  |

### WATCHING

**Task 43. WATCH FOR DETAILS.** Scan the QR code and watch the video “Creativity, Copyright and Fair Use”, then complete the concept map using words from it.



### SPEAKING

**Task 44. COLLABORATE.** Work in pairs. Tell your partner if you've ever engaged in or witnessed any of the following activities.

#### Are We All Violators?

1. Have you ever downloaded software or movies without paying for them?
2. Have you ever used someone else's password to access paid content?
3. Have you ever shared a subscription or login information with friends or family?
4. Have you ever used software or media without a proper license?
5. Have you ever copied code or assignments without giving proper credit?
6. Have you ever bypassed security measures on a computer system?

**Task 45. COLLABORATE.** Work in pairs. Read the following situations and answer the questions below.

#### **Copied Code**

James Smith, a software developer at a leading tech company, was fired after it was discovered that he had copied significant portions of code from open-source projects without giving proper attribution. The company had strict policies on intellectual property, and James's actions were a clear violation of those rules. His excuse was that he was under pressure to meet deadlines, but his employer took a strong stance on maintaining ethical practices.

#### **Stolen Digital Assets**

Lucy Carter, a student at a university, was caught downloading and sharing copyrighted music and movies on a peer-to-peer network. The university's IT department traced the activity back to her account and suspended her access to university resources. Lucy claimed she didn't know it was illegal to share those files, but the university's code of conduct clearly stated that unauthorized sharing of copyrighted material was prohibited.

1. What did James Smith do wrong, and what were the consequences of his actions?
2. How did Lucy Carter violate her university's code of conduct, and what was her defense?
3. How could both James and Lucy have avoided these situations?
4. What ethical principles are at play in these situations?

**Task 46. COLLABORATE.** Work in small groups. Discuss the questions below.

1. Is it always clear when you're violating intellectual property rights? What signs should you look for to ensure you're not infringing on someone else's work?
2. What should a company or university do when it discovers a violation of intellectual property or computer ethics? Should they take immediate action, or is there room for leniency?
3. If you were in James's or Lucy's position, what would you have done differently?

**Task 47. SPECULATE.** Complete the questionnaire and compare your variants with a partner.

1. You find a USB drive at your workplace or school containing confidential data. Do you:
  - a. keep it and see what's on it?
  - b. turn it into the IT department or your supervisor?
  - c. delete everything and throw it away?
  - d. do something else?
2. You see a friend sharing paid software with others for free. Do you:
  - a. say nothing and mind your own business?
  - b. tell them it's wrong and ask them to stop?
  - c. report them to the software company?
  - d. do something else?
3. You are working on a group project, and someone suggests copying code from an online source without proper attribution. Do you:
  - a. agree and hope nobody finds out?
  - b. refuse and insist on doing it the right way?
  - c. report the suggestion to the professor?
  - d. do something else?
4. You discover a way to bypass software license keys to access premium features for free. Do you:
  - a. use it to get those features without paying?
  - b. share the trick with your friends?
  - c. report it to the software company?

d. do something else?

**Task 48. COMMUNICATE.** Complete the dialogues with appropriate ideas. Change roles.

### Copyright Infringement in Music

**Dexter:** Billy, did you hear about that new music video that went viral last week? Turns out they used one of Jason's songs without asking.

**Billy:** No way! Did they think nobody would notice? That's pretty bold. What's Jason gonna do about it?

**Dexter:** .....

**Billy:** Yeah, I get that. But sometimes, once these things get out, it's hard to put the genie back in the bottle. Once you open the floodgates, it's all over the internet.

**Dexter:** .....

**Billy:** Yeah, I guess you're right. It's kind of like stealing someone's hard work. I hope Jason gets some compensation for it. These things can get pretty messy.

**Dexter:** .....

**Billy:** Yeah, totally. It's just like that other case we heard about, where an artist's song was used in a commercial without permission. If you don't have a strong copyright protection plan, it's like leaving your door wide open for anyone to just walk in and take what they want.

**Dexter:** .....

**Billy:** Yeah, but you know how it is. Some people just assume they won't get caught or think that if they do, they can just say "Oops, my bad" and patch things up. It's not that simple.

**Dexter:** .....

**Billy:** Right? Once you turn a blind eye to copyright laws, it sets a bad precedent. It makes other people think it's okay to do the same thing.

**Dexter:** .....

**Billy:** I guess that's why artists have to be proactive. They need to make sure they're registered and have proper legal advice.

**Dexter:** .....

**Billy:** For sure. Anyway, let's hope Jason gets what he deserves.

**Dexter:** .....

### Patents

**Liam:** Hey, did I tell you I finally got my patent approved for the project I worked on at university?

**Jess:** Wow! That's amazing! How did you manage that? I heard it's a real challenge to get one.

**Liam:** .....

**Jess:** Sounds like going down the rabbit hole. How long did it take from start to finish?

**Liam:** .....

**Jess:** So, what's next? Does this mean nobody can use your invention without your permission?

**Liam:** .....

**Jess:** That's awesome, Liam. I bet that gives you a lot more freedom to develop your ideas without worrying about someone else taking credit for them.

**Liam:** .....

**Jess:** Wow, that's really cool. So, do you have any plans to actually develop your invention further, or are you just going to sit on the patent and see what happens?

**Liam:** .....

**Jess:** So, are you going to take out more patents or something?

**Liam:** .....

**Jess:** Good call. So, are you doing all this solo, or do you have a team behind you?  
**Liam:** .....  
**Jess:** Oh, I hear you. Once the cash starts flowing, everyone wants a piece. I hope you can keep your team tight-knit. No one wants a patent dispute among friends.  
**Liam:** .....  
**Jess:** Smart thinking. Anyway, congrats on the patent! Let me know when you're ready to show off your invention. I'll be there to support you.  
**Liam:** .....

**Task 49. COLLABORATE.** Work in groups. Each group is given a case study where a type of intellectual property was used. Discuss how the IP protection was applied, its effectiveness, and any challenges faced. Share your group's analysis with the class.

**Case Study A.** A music company uses Copyright to protect its artists' songs from unauthorized downloads.

**Case Study B.** A tech start-up secures a Patent for a new software algorithm, preventing competitors from copying it.

**Case Study C.** A fashion brand uses Trademarks to distinguish its products from counterfeit goods.

**Case Study D.** A secret recipe for a popular beverage is kept as a Trade Secret.

**Task 50. COLLABORATE.** Work in groups. Create a fictional business. Decide what types of intellectual property your business will need to protect its products, ideas, and brand. Create a plan describing how you will protect your intellectual property (e.g., filing for patents, using trademarks, etc.). Share your business idea and IP protection strategy with the class, explaining your choices and how they will protect your business.

Ideas for businesses:

- a tech start-up, developing a new wearable technology.
- a fashion brand, creating a unique clothing line.
- a game developer, designing an innovative video game.
- a publishing company, producing original content for digital platforms.

**Task 51. ANALYZE.** Read the case studies and suggest possible solutions to the problems.

#### **Software Copyright Infringement**

A small software development company discovers that a larger corporation has copied their software code and integrated it into their own product without permission. The smaller company wants to take legal action but is unsure about the best course of action.

#### **Trademark Dispute**

A startup company named "TechSavvy" receives a cease-and-desist letter from another company claiming that they are infringing on their trademark, as they already own the rights to the name "TechSavvy." The startup needs to decide whether to challenge the claim or rebrand their company.

## **WRITING**

**Task 52. WORK WITH WORDS.** Read the explanation letter and fill in the missing words.

clarification • recognition • internally • rights • in question • development •  
 next-generation • existing • confirm • accusation

Dear Ms. Johnson,

I hope this letter finds you well. I am writing to address the recent 1) \_\_\_\_\_ made by BrightTech Inc. regarding our use of intellectual property that belongs to your company.

TechnoCreatives Inc. takes intellectual property 2) \_\_\_\_\_ very seriously, and we have thoroughly investigated the claim. Upon reviewing our development process and comparing it

with the patented technology 3) \_\_\_\_\_, we are confident that no infringement has occurred.

Here is an overview of our development process that relates to the technology:

Our project started on January 15, 2023, aiming to create a 4) \_\_\_\_\_ augmented reality headset for consumer markets. Throughout the 5) \_\_\_\_\_ phase, our team conducted extensive research to ensure our solution was innovative and distinct in the market. We were mindful of 6) \_\_\_\_\_ patents and followed best practices in intellectual property rights. The specific technology in question was developed 7) \_\_\_\_\_ at TechnoCreatives. Our engineers designed it based on advanced image 8) \_\_\_\_\_ algorithms and proprietary software developed specifically for our AR headset.

Regarding the patent owned by BrightTech Inc., we 9) \_\_\_\_\_ that our technology does not infringe upon any of your registered intellectual property rights. Our solution operates on a different principle and serves a distinct purpose within our product lineup.

We value our relationship with BrightTech and maintain ethical standards in our business practices. Should you require further 10) \_\_\_\_\_ or wish to discuss this matter in detail, please do not hesitate to contact me directly at (555) 123-4567 or [john.smith@technocreatives.com](mailto:john.smith@technocreatives.com).

Thank you for your understanding and cooperation in resolving this issue promptly.

Sincerely,

John Smith

Product Manager

TechnoCreatives Inc.

**Task 53. WRITE.** Write an explanation letter based on the situation below.

A competitor has raised concerns about your company's use of a similar trademark in marketing materials for a new smart home device. Write a letter clarifying the differences in trademarks and asserting your company's rights to use the mark.

### Useful language:

We are writing to provide clarification regarding...

In response to your inquiry regarding...

Please be informed that...

We wish to explain the circumstances surrounding...

Allow us to clarify the situation concerning...

It has come to our attention that there may be some confusion regarding...

We would like to assure you that...

We understand your concerns and would like to offer an explanation.

Further to our recent discussions...

We are committed to upholding the highest standards of intellectual property protection.

We have conducted a thorough review of the accusations and have found...

We acknowledge the importance of intellectual property rights and take this matter seriously.

It is important to note that...

We trust this explanation addresses your concerns adequately.

### LANGUAGE FOCUS

**Task 54. STUDY AND ANALYZE.** Look at the rule about causative, study in what situations it is used.

#### THE IMPERSONAL PASSIVE

It is used for expressing people's opinions in a formal way.

**Form:** noun+is/are said to + bare infinitive/perfect infinitive

It is said that +clause

**Verbs:** say, believe, think, claim, estimate, etc.

Active	Passive
People know that online platforms often combat piracy.	Online platforms <b>are known to</b> often <b>combat</b> piracy. <b>It is known that</b> online platforms often combat piracy.
People believe that the team will win the cybersecurity championship.	The team <b>is believed to win</b> the cybersecurity championship. <b>It is believed that</b> the team will win the cybersecurity championship.
People assume that the software developer created a groundbreaking app.	The software developer <b>is assumed to have created</b> a groundbreaking app. <b>It is assumed that</b> the software developer created a groundbreaking app.
People claim he has had an influence on many other hackers.	He <b>is claimed to have had</b> an influence on many other hackers. <b>It is claimed that</b> he has had an influence on many other hackers.
People reported that the project was completed ahead of schedule.	The project was reported <b>to have been completed</b> ahead of schedule. <b>It was reported that</b> the project was completed ahead of schedule.
People suggest that the software update is essential.	<b>It is suggested that</b> the software update is essential.

**Task 55. PRACTICE.** Rewrite in the passive starting with the words given.

- People say that Jane has written an outstanding research paper.  
Jane ...
- People think that the new product will revolutionize the market.  
It ...
- People suggest that John is the most qualified candidate.  
It ...
- People insist that the film producer respects copyright laws.  
The film producer ...
- People acknowledge that intellectual property rights protect inventors.  
Intellectual property rights ...
- People reported that the company violated copyright laws.  
The company ...
- People suggest that plagiarism is a serious academic offense.  
It ...
- People claim that the author holds intellectual property rights to the book.  
It ...
- People suspect that the student was engaged in plagiarism.  
The student ...
- People suggest that copyright protection should be strengthened.  
It ...

**Task 56. PRACTICE.** Circle the correct word or phrase.

- It is suggested that cybersecurity measures must **have** / **be** enhanced.
- The website **is speculated** / **had speculated** to be involved in online piracy.
- The security breach was reported to **had** / **have** affected thousands of users.



4. Cybersecurity is known to **be / have been** crucial in today's world.
5. It is suggested that proper citations should **have used / be used** to avoid plagiarism.
6. The malware was thought to **have been distributed / be distributed** through a phishing email.
7. The new technology **has believed / is believed** to change the industry.
8. It **is reported / has reported** that the company has acquired several patents.
9. The incident was supposed to **occur / have occurred** due to human error.
10. It is understood that the data must **to protect / be protected** at all costs.
11. Privacy is agreed **have been / to be** a fundamental right.
12. It is said that the program **to be / will be** updated regularly.