18 What are the chances?

Security

1 Read the laboratory security policies. Are there any areas or rooms in your place of work where similar policies apply?

Research Laboratory Security

1. Doors should be locked at all times.
2. Cameras and mobile phones should be handed in to security before entry.
3. Any outside contractors entering the lab should be accompanied by security guards at all times.
4. Prototypes should be covered with a sheet when outside contractors are present.

2 31 Listen to some people talking about a security breach at the laboratory. What happened? Which of the four policies were breached?

3 Work with a partner. Answer these questions.

1. What photos have appeared on the web?
2. Who is very angry?
3. How many outside contractors were working in the lab?
4. What were they doing?
5. What's the head of security going to do?
6. Why did the men uncover the prototype?

4 31 Listen again and complete the sentences.

1. I thought it .... top secret.
2. .... hand in cameras and mobile phones before they go in there.
3. They .... accompanied by a security guard.
4. I know, but we ....

Should, be supposed to, and should(n't) have

Should and *be supposed to* have similar meanings.
*We **should** hand in our phones.* (It's the right thing to do.)
*We're **supposed to** hand in our phones.* (It's expected.)

We use *was / were supposed to* when something didn't go according to plan in the past.
*The contractors **were supposed to** hand in their phones, but they didn't.*
(NOT ~~*They should hand in their phones but they didn't.*~~)

We use *should(n't) have done* to talk about past events that didn't happen.
*They **should have been** accompanied by a security guard.* (They weren't.)
*We **shouldn't have uncovered** the prototype.* (We uncovered it and it was wrong.)

5 Work with some other students. Discuss security procedures you follow at work or school. Say what you *should / shouldn't* and *are / aren't supposed to do* concerning:

1. the security of the building you work in (access doors, ID cards, etc.).
2. your computer (locking it, passwords, shutting down at the end of the day, firewalls, anti-virus, mail encryption, etc.).
3. confidential information (classifying, clean desk policies, shredding, disposal of documents, etc.).

6 Work in pairs or groups. Read about some more security breaches. Say what *should have* and *shouldn't have* happened.

1. A confidential report about a new product was leaked to a competitor after an employee left it lying on their desk.
2. A service technician found copies of confidential documents in the photocopier when he was clearing a paper jam.
3. A visitor said she was late for an important meeting with the CEO. She was given a pass without showing ID.
4. A cleaner managed to access confidential data after they saw an employee typing his user name and password into his PC.
5. An employee didn't report a missing security pass. Someone else entered the building using it.
6. When a company connected its photocopiers to PCs, documents were printed at the same time as 'normal' photocopying was being done. Confidential documents were often thrown in the waste-paper bin.

7 Read a true story about some security breaches and answer these questions.

1. How did the strangers manage to enter the building?
2. Why were they able to get hold of financial data from the CFO's PC?
3. What did they find in the company's rubbish bins?
4. How did they get the CFO's network password?
5. Were the strangers criminals?

One morning, a group of strangers walked into a large shipping firm and walked out with access to the firm's entire corporate network. Here's how they did it.

They pretended to lose their key at the front door and someone let them in. Then they 'lost' their identity badges outside the secure area on the third floor and another friendly employee opened the door for them.

The strangers knew the CFO was out of town and they entered his office and took financial data off his unlocked computer. Then they dug through the corporate rubbish. They asked a cleaner for a bin, filled it with all kinds of useful documents, and carried it out of the building.

Next, one of them phoned the company, pretending to be the CFO (they had studied his voice). They said they were in a rush and desperately needed their network password. After that, they used simple hacking techniques and gained super-user access to the computer system.

In this case, the strangers were network consultants and they were performing a security audit for the CFO. The CFO never gave them any confidential information, but the company's security systems were so poor that they didn't need it.

8 Work in groups. Discuss these questions.

1. What shouldn't have happened here?
2. What should have been done to prevent this?
3. Could something like this ever happen in your school or workplace? What are people supposed to do that could prevent it?

Discussing risks

1 How effective are cyclists' helmets? Do they increase or decrease the risk of:

a head injury?
b being knocked down by motorists?

32 Listen and find out what one researcher discovered.

2 32 Discuss these questions with a partner. Then listen again to check your answers.

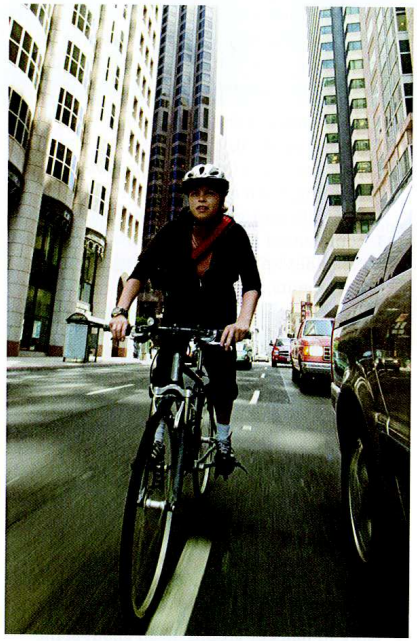
1 Who is Dr Walker and what has he been researching?
2 What's his most important finding?
3 How did he discover this?
4 Why is it a problem if motorists drive closer to cyclists?
5 What experiment did he do with a wig?
6 What did he discover?
7 Does he normally wear a helmet?
8 What are the odds of him being knocked off his bike on his way home?

3 Complete the expressions below with these phrases. Make sure the sentences are true.

less likely	more likely
are more likely to	no chance
the chances are	the odds

Likelihood expressions

Overtaking motorists .....[1] get closer if you're wearing a helmet.
Cyclists are .....[2] to get knocked down at a junction than anywhere else.
Dr Walker doesn't know if you're generally more or .....[3] to be knocked down if you wear a helmet.
If motorists think you're female, ...[4] they'll give you more room.
People disagree about whether a helmet reduces .....[5] of having a serious head injury.
There's .....[6] you'll be knocked off your bike if you go by car.



4 Work in pairs or groups. In your opinion, which of these events is more and less likely?

1 Winning a jackpot in the lottery once in your life or being hit by lightning this year
2 Dying from a shark attack or dying from contact with a poisonous animal
3 Getting on a plane that has a drunken pilot or suffering a severe appendicitis attack
4 Suffering from heartburn (pain caused from indigestion) today or having your identity stolen this year
5 Dating a supermodel or having your marriage to a supermodel lasting for a lifetime

5 Work in pairs and find out if you were right.

A – turn to file 32 on page 101.
B – turn to file 26 on page 98.

Describing probability

The chances of winning the jackpot are 1 in 14 million.
The likelihood of winning the jackpot is 1 in 14 million.

There's a one in three chance. (33⅓% probability)
There's a three to one chance. (The odds are 3:1 – 75% probability)

We have special expressions for 50% probability.
There's a fifty-fifty chance. The odds are even.

We often talk about the odds against improbable things like this:
*The odds **against** being hit by a falling plane are 25 million to 1.*

6 Discuss this puzzle with some other students. Which answer do you think is correct? (Why?) What are your chances of winning?

You are taking part in a TV game show. The game show host shows you three doors. Two doors have a goat behind them and the other one has a car. To win the car, you have to choose the door with the car behind it, and you don't know which one that is.

You point to one of the three doors. The game show host doesn't tell you right away if you are correct or not. Instead, he opens one of the other two doors. This door has a goat behind it. Then he offers you a choice. You can stick with your original choice or switch to the other door. What should you do to maximize your chances of winning?

1 Stick with your first choice.
2 Switch to the other door.
3 It doesn't matter. The odds of winning are the same whatever you do.

7 Check your answer in file 37 on page 103.

8 Here's another game show puzzle. Discuss it and decide which answer you think is correct. What are your chances of winning?

This time you're competing in a two-player game to win the car. You and the other player both choose a door (not the same one).

The game show host opens the door your competitor chose and there is a goat behind it. They've lost! Hurrah! But can you win? You must still choose the correct door to get the car. The host offers you a chance to switch doors. Should you?

9 Check your answer in file 19 on page 95.