UNIT 4 RISK

	Critical thinking	Using illustrative examples to support an argument Anticipating a conclusion based on reasons and evidence
	Language development	Nominalization Possible, probable, and hypothetical future predictions
	Pronunciation	Word stress in word families
	Speaking	Managing conversation

Discussion point

Direct students' attention to the picture on page 37. Ask them what is happening in the picture and what risks the people are taking (a stunt where two people are attempting to fly with a makeshift plane and are risking injury or possible death if they fall).

Then ask students to work in pairs to discuss the questions. To help start them off you could describe someone you know who takes risks.

Cultural awareness

Bear in mind that a discussion of risk-taking behavior may encompass some sensitive topics, such as drinking, gambling, promiscuity, and drugs. These topics are taboo in many cultures, so you may need to steer the discussion to less controversial activities, such as fast or reckless driving, extreme sports, cigarette smoking, risky financial investments, etc.

Vocabulary preview

Write the word *risk* on the board. Ask students what class of word it is (a noun and a verb). Brainstorm any collocations that students already know for both the noun and the verb. Remind them that when learning vocabulary they should always pay attention to common collocations, as knowledge of these language chunks will allow them to become more fluent in both their spoken and written language.

1 Ask students to choose the correct words in the sentences. They can then check their answers in pairs before feeding back to the class.

ANSWERS

1 fatalities	6	unregulated
2 run	7	faced
3 take	8	say
4 poses	9	odds
5 steel	10	on-the-job

- 2 Remind students they only need to choose three expressions. When they have written their sentences, ask them to check the sentences in pairs. Assist with any required correction. Invite volunteers to write some examples on the board.
- **3** Students can check their answers in pairs before whole-class feedback. Draw their attention to the use of the word *of* where *risk* is used as a noun in sentences 1 and 2, and to the verb form in 3.

ANSWERS

- 1 Smokers have a high risk of getting cancer.
- 2 If you eat too much, you run the risk of having health problems.
- 3 If you don't lock up your bicycle, you risk losing it. Rule:

Risk (verb) is followed by the *-ing* form of the verb, not the infinitive.

Risk (noun) is followed by the preposition *of* and the *-ing* form of the verb.

LISTENING 1 The world's most dangerous jobs

Before you listen

Allow plenty of time for pairs to list and rank the jobs. Then invite students to share their ideas with the class.

Listening

- Write the nine jobs from the box on the board. Have a class discussion and try to agree on a ranking for these jobs (1 = most dangerous). Then ask students how many of the jobs would make it onto the list of the world's most dangerous.
- **2** Before playing the audio, ask students to look at the *Academic keywords* box. Check that they can pronounce the words correctly and ensure they are clear on meanings. Encourage them to make a note of the words. Play the audio, then ask students to compare their ideas on the board with what they heard.

AUDIO SCRIPT 1.16

Presenter: Good afternoon and welcome back to World of Work. In this week's podcast we look at the most dangerous jobs in the world. Now, we all know that many jobs come with health risks. If you sit in front of a computer or in an office all day, you run the risk of getting stress, eye strain, and back problems. But some jobs are much more dangerous and can in fact

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kill you. Crashing into a fiery explosion, being crushed by heavy equipment, or falling from a great height are on-the-job dangers that many workers face every single day. Joining us in the studio is Dr. Michael White, an expert on risky jobs, from California. Based on his own research and figures worldwide, he has recently drawn up a list of the most dangerous jobs in the world, and he is going to share some of them with us today. Welcome, Michael.

Michael: Thank you for having me.

Presenter: So, let's get started. The first job you have on your list is, quite frankly, one I had never even considered. Fisherman?

Michael: That's right, Peter. Being a fisherman is an extremely dangerous job. According to the United Nations Fisheries and Aquaculture Department, it's probably the most dangerous job in the world. Data collected from countries show that occupational fatalities in fishing industries far exceed the national average. For example, in Australia the fatality rate for fishers is 143 per 100,000 compared with 8.1 per 100,000 nationally. In the USA, the fatality rates for fishers is 25 to 30 times the national average. These figures are not only high, but they are not going down either. In fact, according to the United Nations Fisheries Department, they may be rising.

Presenter: Why is it so dangerous? Why so many fatalities?

Michael: The danger comes from hauling nets or cages that weigh hundreds of pounds. This in itself poses great risks, but now imagine the same with ice cold waves, wind, and heavy rain hitting you from all sides.

Presenter: Not to mention the risk of drowning, suppose?

Michael: Yes, exactly.

Presenter: So fishing can be considered a very dangerous pursuit indeed. What next?

Michael: Well, although this does not rank quite as high in the U.S., it's certainly a very high-risk job in many other countries. Window cleaners.

Presenter: Window cleaners?

Michael: Yes. Especially the people who clean the outside of windows on tall skyscrapers. Frankly, you would need nerves of steel to do this job. High winds and surfaces slippery with soapy water can, of course, cause you to fall, which is the main cause of death in this profession. That being said, it's very hard to get statistics worldwide on window cleaning, as in many countries it's an unregulated profession.

Presenter: Every time I see someone cleaning one of those very tall buildings on the outside it always makes me nervous.

Michael: Yes, me too. But curiously, the majority of accidents with window cleaners come from falling off a ladder while cleaning windows that are not so high off the ground. The misuse of ladders is one of the leading causes of fall-related injuries and deaths according to the International Window Cleaning Association.

Presenter: Really?

Michael: Yes, and this number could be reduced by offering safety training to people responsible for setting up window cleaning equipment. The issue of safety training is one that comes up again and again in many dangerous professions, like window cleaning or construction. Window cleaners suffer many of the same risks as those working on construction sites. Construction work is also very dangerous for falls and accidents.

Presenter: I can imagine so.

Michael: The next job on the list is also one that many people don't consider automatically as a dangerous one. It's loggers.

Presenter: Loggers. People who cut down trees? Why is that so dangerous?

Michael: Well, loggers work on unstable, uneven terrain, such as mountain slopes. They are also working at great heights, with chain saws and logging machines that are dangerous even when used properly. Add to that the need to watch out for the momentum and massive weight of a huge falling branch or an entire tree. This work has to take place in all kinds of weather, and if a tree is not cut down properly, it can come crashing down in a completely different direction and roll violently down a slope, crushing anyone in its path.

Now, statistics for logging fatalities are not as high as those of fisheries or construction, but it can still be classified as a high-risk occupation and regularly makes the lists of "dangerous occupations" by bodies such as the United States Labor Bureau.

Presenter: Well. Here I was thinking you would be talking about bodyguards, stuntmen, spies, or other jobs like that. Instead we're discussing fishing, logging, construction, and window cleaning.

Michael: Don't get me wrong. It's safe to say that those other jobs you mention also entail risks. But there are, in fact, far fewer accidents in those areas than in the more mundane professions I've been outlining. There is considerably less glamor, and lots more danger.

Presenter: Thank you very much for joining us today. **Michael:** My pleasure.

ANSWERS

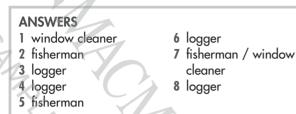
construction worker, logger, fisherman, window cleaner

Critical thinking skill

Refer students to the Using illustrative examples to support an argument box and ask them to read it carefully. Remind students that the examples include extremely descriptive vocabulary, e.g., being crushed by heavy equipment rather than just heavy equipment falls on you. This use of vocabulary is far more engaging and makes it easier to persuade your audience to agree with an argument.

Ask students to write the jobs as they listen to the audio again. They can check their answers in pairs

and come up with other examples for each job together. Remind students to use illustrative examples. Invite students to share their answers and additional examples with the class.



EXTENSION ACTIVITY

Ask students to brainstorm any other dangerous jobs that were not mentioned, e.g., oil rig worker, people in the military, firefighter, police officer, nuclear engineer.

Ask them to work in groups and discuss the risks attached to the jobs they have listed. Encourage them to use illustrative language. Then ask groups to discuss this question: What would encourage a person to do each of these dangerous jobs?

During class feedback, find out if students mentioned the following: money, physical challenge, the need to make a difference, prestige/status, power. Ask if they would be attracted to any of these jobs and why.

Developing critical thinking

Allow plenty of time for groups to discuss the questions. Note that question 4 may be a sensitive area if you are teaching a multinational group, so you may wish to steer the discussion to non-offensive topics, such as attitudes to motorbike helmets, seat belts, rates of smoking, etc.

This is a good place to use the video resource *Risky business*. It is located in the Video resources section of the digital component.

LISTENING 2 What is acceptable risk?

Before you listen

- 1 Ask students to first complete the questionnaire individually. They can then compare their answers in pairs and decide who is more of a risk-taker.
- 2 Ask pairs to write a definition together. Invite pairs to share their definitions and write a few on the board. Don't comment at this point, but tell students they will hear more about this term in the audio.

POSSIBLE ANSWER

Acceptable risk means a level of risk people are willing to take.

Listening

1 Play the audio. Discuss the definition of "acceptable risk" with the class. Compare it with the definitions they came up with. Then check that students understood the professor's purpose in the seminar.

AUDIO SCRIPT 1.17

Professor: Welcome back, everyone. I'd like us to take a break from looking at environmental law to discuss safety and danger in more general terms. You've all been given some reading about risk to do. I'd like to start by asking you all a question. Is it possible to ever really be completely safe from danger?

Class: Yes. / No. / Not sure.

Professor: We can all think of examples of activities that we think are safe, but we can also imagine that for each safe activity there is a possibility of danger.

Student 1: Can we say an activity is safe if the possibility of danger is very, very small?

Professor: Hmm. Perhaps. But let's take two activities. Climbing a mountain and driving a car. Both are dangerous activities. And in fact, more people die from car accidents than mountain accidents. In the United States, according to the Alpine Club of America, there are 25 deaths on average per year from mountain climbing. But there are between 30 and 40 thousand deaths from car accidents every year as well, according to the U.S. Census. So why do most people feel that driving a car is safer?

Student 1: It's easier than climbing a mountain.

Student 2: Maybe it's because it's a danger we can control. So it feels safer.

Professor: But it's still not without risks. One of the first points we have to understand is that safety is NOT the same as zero risk. So what makes us willing to engage in an activity that has risk? Or, more to the point, why would most people, given the choice, prefer to take the risk of getting in a car as opposed to hanging off the side of the mountain? The answer lies in the notion of acceptable risk. Does anyone have a definition of this?

Student 1: Yes, I've got it here. "Acceptable risk" describes an unwanted event which can meet any one of these categories: 1. it's very unlikely to happen; 2. the consequences of the event are not very serious; 3. the benefits of taking the risk are great.

Professor: Very good. We have the concept of acceptable risk because we know that absolute safety is almost impossible to achieve.

Student 2: Acceptable risk is often discussed in decisions about environmental health and safety, right?

Professor: Exactly. Does anyone else have anything on that? ... For example, is there a measurement of acceptable risk?

Student 1: I read that many authorities are reluctant to specify what is an acceptable risk. Which, I guess, is understandable ...

Student 2: If the chance of something bad happening is really, really small ...

Student 1: But how small is really small?

Professor: Well, there is one measurement that has emerged. The one-in-a-million measurement. Have any of you come across that? It originated in the 1960s in the United States and is now widely used around the world, including by the World Health Organization. Let's say you are responsible for deciding if a certain product, like a shampoo or a kind of medicine, is dangerous. The one-in-a-million test asks, "Does this substance (shampoo, or medicine) have more than a one-in-a-million chance of causing death?"

Student 1: One in a million feels pretty safe.

Professor: Yes, it does. But it's not 100% safe. Let's look at another example. Clean drinking water in a city. How do you decide if it is dangerous or safe? And if it's safe, what is a safe level? Well, if the local health administration decided that by drinking the local water over a lifetime the chances of a person dying from drinking that water were one in a million or less, then that would be considered acceptable risk.

Student 2: Makes sense. I guess the same concept can be used for all kinds of things?

Professor: Of course. Acceptable risk informs decisions about what we drink, about the food we eat, about the products that are sold to us, and about the activities we are allowed by law to do.

Student 1: But professor, you mentioned at the beginning something about driving cars? The risk of having a fatal car accident is more than one in a million. I've got it here, at least in the figures for the U.K. The odds of dying in a car accident in the U.K. are 1 in 240.

Student 2: And probably more in this city.

Professor: Very good point. Over a lifetime of driving, the risk to your life is much more than one in a million. In some places, it's a lot more than the figure of 1 in 240 that was just quoted. And we still allow it, and everyone does it. Remember we had three aspects to the definition of acceptable risk? The first was that the event was unlikely to happen, the second was that the consequences of the event were small, and the third was ...

Student 2: That the benefits of taking the risk were great.

Professor: Yes. A higher level of acceptable risk may in fact be tolerated if the benefits are considered much larger. Additionally, we may also tolerate higher risks if they are voluntary—if we choose to take them—than if they are involuntary. Feeling in control will help us tolerate higher risk.

Student 1: And I guess people have a sense of control when they drive. I mean, people feel more in control driving a car than taking an airplane, I guess. And I know that airplane accidents are a lot less common than car accidents, which means technically it's safer. But I feel that it's riskier ...

Professor: Indeed. So. To conclude ...

ANSWERS

The student in the audio says that acceptable risk describes an unwanted event that can meet any one of three categories.

The professor's purpose is to explain the concept of acceptable risk.

2 Before you play the audio again, allow students to try the exercise using what they can remember. Then play the audio so that students can complete their answers. Check the answers as a class, then refer students to the *Academic keywords* box. Drill the words to assess students' pronunciation. Encourage the use of the schwa sound in the first syllable of *acceptable*.

ANSWERS 1 F 2 T 3 T 4 T 5 F 6 T 7 NG 8 T

EXTENSION ACTIVITY

Write the following questions on the board and ask students to discuss them in pairs or small groups.

- 1 What risks have you taken so far today?
- **2** Which of the following do you think are acceptable risks and why?
 - eating out-of-date meat
 - driving over the speed limit on the motorway
 - investing all your savings in a new company
 - leaving your house unlocked all day
 - smoking 20 cigarettes a day despite the known health effects

Monitor and circulate, noting any language issues and any interesting points that students make. Open the discussion up to the class and give any necessary language feedback.

Critical thinking skill

Ask students to read the information in the *Anticipating a conclusion based on reasons and evidence* box. Highlight that anticipating a conclusion is useful as it demonstrates how well you have understood a talk.

- 1 When students have chosen a conclusion, they can compare their answers with a partner. Encourage them to give reasons for their choice.
- **2** Play the audio, then check the answer with the class.

AUDIO SCRIPT 1.18

Professor: In the end, we still come back to the notion that danger exists everywhere. There is nothing in life that is completely risk-free. We just have to learn how to manage it, and live with it.

ANSWER

3 Ask students to listen to the lecture again and check the relevant sentences.

ANSWER

Checked sentences should be: 1, 3, 5, 7

Developing critical thinking

- Circulate and monitor as the groups discuss the questions. Make a note of any language errors for correction. Also make a note of interesting points that are raised and encourage groups to share ideas with the class.
- 2 Ask students to discuss the questions in groups.

Language development: Nominalization

Refer students to the *Nominalization* box and ask them to read it carefully. Highlight the fact that nouns and noun phrases are far more common in academic English than verb phrases, so it is really important for them to develop this aspect of their vocabulary. Check that they know what suffixes are (endings to words).

1 Students should work individually. They can then check their answers in pairs before feeding back to the class.

ANSWERS

	- A.
explode (verb)	1
measure (verb)	1
organize (verb)	
safe (adj)	
	measure (verb) organize (verb)

2 When the students have finished, write the answers on the board to ensure students are clear on spelling, particularly when suffixes alter the spelling slightly (e.g., *generous—generosity*).

ANSWERS	
achievement	generosity
decision	insecurity
expansion	involvement
expectation	uncertainty

3 Students can refer to their dictionaries for help if necessary. Have them compare their answers with a partner before feeding back to the whole class.

POSSIBLE ANSWERS

- 1 The company has made an investment of millions of dollars in risk assessment.
- 2 The government questions the accuracy of this report.
- 3 Do not underestimate the seriousness of the problem.

- 4 With a little intelligence, most risks can be avoided.
- 5 Our company has a commitment to public safety at all times when people are on our trains.
- 6 The president had always known about the existence of risks, but chose to ignore this information.
- 7 The inclusion of reports from several experts gave the paper more authority.

EXTENSION ACTIVITY

- 1 Write the word *risks* in a circle in the middle of the board. Then create a spider diagram from this word using the following verbs that collocate with *risks: avoid, tolerate, anticipate, manage, mitigate.*
- 2 Check that students understand the verbs (they can use a dictionary if necessary). Drill the verbs, ensuring students are using the correct stress for each: (avoid, tolerate, anticipate, manage, mitigate).
- **3** Ask students to work in pairs to write sentences with these verbs and the word *risks*. Then ask pairs to identify the nouns for each of these verbs (*avoidance, tolerance, anticipation, management, mitigation*). They should then rewrite their sentences, using the nouns rather than the verbs.
- **4** Invite volunteers to write their noun sentences on the board. Encourage students to provide peer feedback and to correct each others' sentences.

Language development: Possible, probable, and hypothetical future predictions

Refer students to the *Possible, probable, and hypothetical future predictions* box and ask them to read it carefully. Check that they understand the difference between possible, probable, and hypothetical future predictions by asking them to give a percentage for each one based on how likely it is to happen (e.g., probable 80%, possible 30%, hypothetical 2%).

EXTENSION ACTIVITY

Check that students are clear on conditional sentences. Write the following on the board:

A If I pass my exams, I will go to university.

B If I had lots of money, I would buy a sports car. Ask students which is a first conditional (A) and which is a second conditional (B). Ask which prediction is more probable (A) and which is more hypothetical (B). Highlight how the sentences are formed (first conditional = present simple + will; second conditional = past simple + would).

Ask students to rewrite sentence A using As long as (As long as I pass my exams, I will go to university.) and sentence B with Suppose (Suppose I had lots of money? Then I would buy a sports car.).

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Remind students to refer back to the table for the language they need to help them complete the sentences. Students can check their answers in pairs before feeding back to the class.

POSSIBLE ANSWERS

- 1 (unlikely) event (written or spoken)
- 2 probably/likely (spoken)
- 3 providing (that) (written or spoken)
- 4 Even if (written or spoken)
- 5 Assuming (that) / As long as / Providing (that) (written or spoken)
- 6 Suppose / Supposing (spoken)
- 7 As long as (written or spoken)
- 8 Unless (spoken)
- 2 Students can stay in their pairs to complete this task. Again, refer them back to the *Possible, probable, and hypothetical future predictions* box to help them. Invite volunteers to write their sentences on the board for analysis.

SPEAKING Undertaking an informal risk assessment

Pronunciation skill

Refer students to the information in the *Word stress in word families* box. Model the pronunciation of the words for the class so that they can hear the word stress.

Remind students to match the words in the box with the rules first, then they can cross out the incorrect options. During class feedback, model the pronunciation of the words and drill them to check students' use of word stress.

ANSWERS

- 1 destruction; the second to last
- 2 dangerous; unstressed
- 3 impossible; unstressed
- 4 sunglasses; first
- 5 well-behaved; unstressed

EXTENSION ACTIVITY

Write the following sentences on a sheet of paper, copy it, and cut them up into sentences. Divide your class into pairs and give each pair a set of the four sentences. Ask them to take turns to take a sentence and read it aloud with the correct word stress. Remind them to check the rules they completed in the exercise to help them. Students can correct each other, but monitor and provide input where needed.

- 1 The information was a revelation to the organization.
- 2 The dangers are considerable, examinable, measurable, and understandable.

- **3** The disregard for safety in this place is unbelievable and illogical.
- 4 For this as**sign**ment, you need a **lap**top, **note**book, **ball**point pen, and **clip**board.

Speaking skill

Refer students to the *Managing conversation* box and ask them to read it. Highlight the fact that they will need to manage conversations in seminar debates. Allow students to read the phrases and make a note of the use of each one. During class feedback you could drill these phrases to check students' pronunciation and to allow them to become more familiar with these useful language chunks.

ANSWERS

CT: 2, 4, 6, 9 ST: 1, 3, 8, 10 CB: 5, 7

EXTENSION ACTIVITY

Divide the class into groups of three (Student A, Student B, and Student C). Write the following topics on the board: the weather this week, a country you'd like to visit, a job you'd like to have, a job you'd hate, a sporting event you saw on TV, how your city has changed.

Then explain these instructions, reminding students to use the phrases for managing conversations:

- 1 Student A begins talking about one of the topics.
- **2** Student B listens and interrupts politely, trying to change the topic to something different.
- **3** Student A continues the conversation and tries to get back to his/her original topic.

Tell Student C to monitor and write down the expressions used so that he/she can then give feedback to others.

SPEAKING TASK

Background information

Formal risk assessment is conducted within many industries, e.g., engineering, nuclear, aerospace, oil. The risk assessment in these situations examines potential hazards, looking at how likely they are to happen, and what the potential losses would be if they did. Risks to human health need to be considered as a priority in all cases. In contrast, with informal risk assessment, the stakes are not so high. Informal risk assessment is used widely in business, especially within project management. This speaking task utilizes informal risk assessment tools, such as risk identification and ways of minimizing risk.

Risk

Brainstorm

Put students into groups. Ask them to read the situations and decide together which one they will focus on (or they can create their own if they prefer).

Plan

- Ask students to work individually to list risks and dangers. Refer them to the ideas in the box to help them, but encourage them to think of their own ideas, too. Ask students to note down their ideas and to write some illustrative sentences to support them. They can look back to page 39 to help them with their illustrative examples.
- **2** Ask students to continue to work individually at this point, listing risks and suggesting action.

Speak and share

Groups now work together to discuss their ideas. Encourage students to make predictions. Refer them back to the language on page 43 if they need help with this. You should also remind them to use the phrases from page 44 during the conversation. Groups must then agree on the three most important risks and how they will minimize these risks.

Put groups together and ask them to share their risk assessment. Encourage groups to question each other, using language to hypothesize where possible. During this stage, monitor and take language notes. Use the photocopiable *Unit assignment checklist* on page 91 to assess the students' speaking.

Extra research task

Ask students to choose **one** of the following topics to research online:

- 1 Does gender and age affect a person's willingness to take risks? If so, what reasons are there for this?
- **2** Are attitudes towards risk-taking linked to nature (personality) or nurture (environment and upbringing)?

Ask them to make notes on their chosen topic. In the next class, group students together according to their chosen topic and ask them to discuss their online research. Encourage them to use the phrases for managing conversations during their discussions.

CRITICAL THINKING SKILLS Knowledge, skills and attitudes

Ask students to complete the self-evaluation questionnaire. They can then read the *Interpreting your score* section. This activity is important as it allows students to assess their own critical thinking skills and reminds them what they need to do in order to raise their skills to the highest possible level.

Cultural awareness

Many of your students may come from cultures where criticizing others and their opinions is seen as impolite. These students do not want to appear disrespectful, but you need to remind them that in western universities it is essential that they do not blindly accept any arguments in an academic context. In western universities they will be expected to analyze, evaluate, and criticize as ways they can fully engage with the academic community and produce meaningful research of their own.