

Read the list of factors aloud. Play the audio and ask students to number the factors as they hear them.

AUDIO SCRIPT 2.15

Professor: Good afternoon. In my lecture today I'm going to focus on some research on what makes sounds annoying. I think we would all agree that loud sounds, like the sound of a car alarm, or door banging can be annoying. But, let's consider what other factors come into play.

First, a sound can be annoying because we don't know when it will stop. This uncertainty about how long the sound will persist is what irritates us. Even a distant bell or quiet beep can have this effect. At first you may not notice the sound. But, if it continues, it becomes distracting—and increasingly annoying.

This uncertainty factor is part of the common experience of being irritated by a stranger's phone conversation in a public place. Initially, you may hardly notice the conversation. As the conversation continues, however, you start to feel slightly annoyed. You may tell yourself it's because the person is speaking too loudly, or because you don't want to know a stranger's personal details. Researchers, however, have found, it's not knowing when the conversation will end that makes it so annoying.

Second, something repetitive, like a dripping faucet, seems to be universally annoying. As we hear the regular drip, drip, drip, over and over, we become distracted by it. Over time, it seems to magnify in intensity until it is the only thing we notice. We become increasingly annoyed. And, again it's not knowing if the sound will ever cease that gets to us.

On the other hand, unpredictable sounds are also annoying. Think about sounds in nature, like the sound of a mosquito or a fly buzzing near you. Researchers have found that one reason flies and mosquitoes bother us is because they fly in irregular patterns. Although we know the sound will vary from loud to soft based on the fly or mosquito's proximity to us, we can't know how loud it will be the next time we hear it because flies and mosquitoes move about in a random way. Our brain still attempts to predict the loudness of the next sound, and *when* we will hear it, but unfortunately, it can't determine this. The result is we become increasingly bothered by the sound.

If you've tried to fall asleep with a fly or mosquito buzzing around in the room, you'll know what I mean.

Someone's fingernails scraping on a chalkboard also seems to be universally annoying. Most of us assume it is annoying because it has a high pitch. However, researchers have concluded that it isn't the high pitch that bothers us. So, pitch is the fourth factor. The scraping is actually made up of a range of sounds from high to low frequency. In turns out, we are irritated more by the *low* sounds because our ears are more sensitive to them.

Moreover, as the fingernails travel down the board, the volume changes from loud to soft in an unpredictable way. Researchers have concluded that this also contributes to why it is so annoying.

Thus, the main takeaway here is that a fly buzzing around our ears and fingernails scraping a chalkboard share a reason for being annoying, which is that they're unpredictable. Of course, understanding the reason *why* some sounds are annoying doesn't help us feel less irritated when we hear them.

OK, are there any questions?

Student 1: Yes, what is "pitch"?

Professor: The question was: What is pitch? Pitch means how high or low a sound is.

Student 2: What do you mean by frequency?

Professor: You asked what frequency is. We will talk about this more next week.

ANSWERS

- 1 uncertainty about how long it will last
- 2 regular, repetitive
- 3 unpredictability
- 4 the pitch

Close listening

- 1 Play the audio again and ask students to circle the correct idea to complete each explanation for the factors. Go over the answers.

ANSWERS

- 1 we don't know when they will end
- 2 repetitive
- 3 doesn't stop
- 4 an unpredictable way
- 5 low

- 2 Put students into pairs to answer the questions.

ANSWERS

- 1 *Universally annoying* means annoying to most people.
- 2 They are both unpredictable.

Exam tip

One task on the IELTS Test requires students to read a question and write a short answer. Their short answer must use information from the listening text. This task type limits the amount of words a student can use, so encourage the use of short answers for exercise 2.

Developing critical thinking

Before students discuss the questions, review the *Academic keywords* box on page 89. Tell students that these are key words used in the listening, and point out that *attempt* and *factor* can be both a noun and a verb. Ask them to copy the words into their vocabulary notebooks.

EXTENSION ACTIVITY

Remind students that many words in English can be both a noun and a verb. Being familiar with these can help them write better if they can use words more than one way. Write sentences using *attempt* and *factor* as both a noun and a verb. Put the sentences on the board. Sample sentences might include: *The teacher asked us to consider four factors. We factored the results into our decision. The attempt was a good one. My brother attempted to win the race.* Mention that the name of this unit, *sound*, is another example. Ask students to write sentences. Provide a list of other words that can be both nouns and verbs, and ask students to write sentences. To further extend the activity, ask students to submit their sentences and create a quiz for a future date, or ask students to write their sentences on the board leaving a blank line where the word belongs. Other students can then guess the missing words. Possible words to provide include: *play, film, cause, help, laugh, march, text, question, copy, visit.*

LISTENING 2 Was that my phone ringing?

Word count 763

Background information

Phantom ringing is also known by other names: ringxiety, HypoVibroChondria, and fauxcellarm. Humans generally hear sounds that are between 1,000 and 6,000 hertz, which coincides with the level at which most phones and mobile phones ring. Phantom vibration syndrome—when people think their phone is vibrating when it isn't—is a recognized disorder. Some people believe phantom vibrations may have psychological or neurological causes.

Before you listen

Focus on the first question and invite volunteers to share their answers. Ask students if they are familiar with the concept of “the power of suggestion.” Give them time to answer the other questions and see if they can think of reasons why these things might happen. Explain what “the power of suggestion” is if necessary. The power of suggestion is sometimes studied in psychology. It is the idea that a person’s thoughts or actions can be influenced by suggestion. Some studies have been performed to determine how powerful suggestion is. For example, sick people may begin to feel better if they take a pill. If the pill is replaced with one that contains no medicine, but the person does not know that it isn’t a “real” pill, they may say they feel better anyway. More modern and technical studies include the use of hypnosis. Once a person is hypnotized (or put into a state similar

to sleep in which they can still hear and react to suggestions), they often react to whatever is suggested by the hypnotist.

EXTENSION ACTIVITY

List symptoms of common health issues on index cards. Put students into groups, and ask them to read the symptoms and determine the health issue. Ideas for common health issues to use include: the common cold, influenza, chicken pox, high blood pressure, heart attack, mumps, SARS, sinus infection, ear infection, stomach ache, appendicitis, and migraine. Ask students to read their symptoms and diagnosis to the rest of the class before revealing the correct answers. To extend the activity, distribute cards to more than one group to see if there are different diagnoses for the same problem. Revisit the idea of “the power of suggestion” to see if students might be influenced by the groups who had already made a diagnosis.

Global listening

- 1 Play the podcast in its entirety. Remind students of the importance of writing concise answers for academic tests and the IELTS Test. Go over the answers.

AUDIO SCRIPT 2.16

Tara is watching TV and waiting for her friend to call. She reaches for her phone because she’s sure she heard it ring. It didn’t, though. Sometimes the brain plays tricks on people. Sometimes it perceives sounds that aren’t there. Two curious examples of this are: phantom phone rings and vibrations, and phantom words.

A phantom phone ring is when someone wrongly hears a phone that isn’t ringing. Psychologists call this a phantom sound because it isn’t actually made. Phantom phone rings are common and seem to be more common now than in the past. In one survey, about two thirds of people said they have experienced a phantom phone ring at least once. Researchers aren’t certain what causes phantom phone rings, but several possible reasons have been given.

First, phantom rings seem to be tied in with the brain trying to process the sounds it receives. People have reported phantom rings after hearing a few notes in a TV commercial similar to their ring tone, or by running water, using a hair dryer, turning on a washing machine, or even after hearing a car go by.

Second, waiting for a call can trigger a phantom phone ring. As someone anxiously waits for the call, they imagine the phone rings because they want it to. In other words, it’s stress that makes them hear the phantom ring.

Another possible reason is also related to the stress of anticipating a call. In this case, someone decides to briefly do something during which they won’t have access to the phone for a few minutes. As soon as the phone is no longer in close proximity, the person is sure it is ringing. It appears this happens because the person was convinced the phone would ring.

A stranger variation on phantom phone rings is phantom phone vibrations, which is experienced by people who leave their phone on vibrate mode. They imagine they feel their phone vibrating when there is no call or text. There is actually a disorder related to this called phantom vibration syndrome. Phone users who have this syndrome typically carry their phone in the same place on their body regularly. It is thought that this leads the brain to become trained to anticipate vibration from that part of the body; for example, the right hip. Over time, though, the brain starts to overanticipate vibrations. The result is that the person thinks calls or texts are coming in even when they aren't. Obviously, this can be distracting and annoying if someone is watching a movie or eating dinner.

The other example of sound perception—or rather, misperception—is the phenomenon of hearing phantom words—words that no one actually said. In one study, researchers had some volunteers listen to a recording. The recording was made up of repeated words or phrases, not sentences. The people weren't told what was on the recording. After they listened several times, they were asked to recall any words and phrases they had heard. Many reported hearing words and phrases that weren't on the recording. One explanation for where these words and phrases came from is that the human brain tries to take meaningless noises it receives and give it some sort of meaning.

Interestingly, the researchers found that what people were thinking about prior to listening to the recording had an effect on which words and phrases they heard. For example, a person who is trying to lose weight, might hear phrases about food. A student preparing for an exam, might hear words and phrases related to the exam or to the subject being studied.

Another study was carried out, this time on language learners. Students of different nationalities who were all learning English were played a recording in English. The researchers found some students heard words and phrases in their first language while listening to the recording. For example, Chinese students heard some Chinese words in the recording, while students who spoke Arabic or Spanish heard Arabic or Spanish words. What's striking is that some students were even convinced that Chinese, Arabic, or Spanish words had been inserted into the audio track, even though this wasn't true. The same results were found even when the students heard the recording several times.

With both phantom phone rings and phantom words, researchers aren't certain why people hear what they do, but it appears that the brain is working hard to interpret sounds and give it meaning. Perhaps people would hear fewer phantom rings if they paid less attention to their phones, but that isn't likely to change any time soon.

ANSWERS

- 1 A phantom ring is a phone ring that doesn't actually occur.
- 2 People feel their phone vibrating even when it isn't.
- 3 Phantom words are words that no one actually said.
- 4 two

Close listening

Open a discussion by asking students how they can tell when someone is angry. Elicit general answers, but then focus on voice. Elicit answers such as *their voice is louder* or *their tone changes*. Ask students to read the information in the *Listening to interpret the speaker's attitude* box. Explain that words can help a speaker convey attitude. Tell students that if intonation is challenging, noticing words is a good strategy. Draw their attention to the words in the *Academic keywords* box. Check pronunciation and have them copy them into their vocabulary notebooks. Review information about intonation from unit 4 if necessary. For extra practice, ask students to write dialogues about sound. Require them to include words that help convey their attitudes about the sounds they are describing. Consider printing the dialogues and asking students to guess the sound using just the words. Then ask students to perform their dialogues using appropriate intonation. Reinforce the idea that the combination of intonation and words can be very powerful.

- 1 Ask students to read the notes. Play the audio again and have them complete each blank with up to four words.

ANSWERS

- 1 the sounds it receives
- 2 stress
- 3 in the same place (regularly)
- 4 meaningless sounds
- 5 words and phrases
- 6 weren't on the recording
- 7 students / language learners
- 8 own language

- 2 Play the audio again. Encourage students to interpret the attitude of the speaker to determine if the sentences are true or false. Ask them to correct the false statements.

ANSWERS

- 1 T
- 2 F (researchers don't understand)
- 3 F (other tasks are mentioned, not dreaming)
- 4 T
- 5 T
- 6 F (they recalled different words, depending upon their nationality and what they had been thinking about before listening to the recording)
- 7 F (several times)
- 8 T
- 9 T

EXTENSION ACTIVITY

Ask students to research one of the three phenomena mentioned in the podcast: phantom ringing, phantom vibration, or phantom words. Challenge them to find real-life examples and/or more details. Have them bring their research to class. Group students by the phenomena they chose to compile research. Then form groups of three with one person representing each phenomena. Let them take turns presenting new information to the group.

Developing critical thinking**SUPPORTING CRITICAL THINKING**

Critical thinkers are able to rely on their own personal experiences and apply those to group discussions in which everyone may have different experiences. A good critical thinker is able to communicate ideas and listen to others without being too easily influenced to change his or her ideas. That said, a good critical thinker should be prepared to change his/her position if there is a good argument to do so.

- 1 Tell students that the questions are related to the listening text *Was that my phone ringing?* and allows students the opportunity to grow as critical thinkers by relying on their own experiences to develop reasons.
- 2 Put students into groups to discuss their answers, before holding feedback with the whole class. Point out the use of a chart, and review the reasons why charts are a good way to organize and visualize information. Remind students that their charts may all be different and to take the opportunity to justify their answers.

This is a good place to use the video resource *Communication*. It is located in the Video resources section of the Digibook. Alternatively, remind the students about the video resource so they can do this at home.

Vocabulary skill

Explain that word + preposition combinations are common in English; point out that since changing the preposition can change the meaning of the word, it is more helpful to learn the meaning of each word + preposition together. Ask students to read the examples in the *Word + preposition combinations* box.

- 1 Give students time to complete the text before playing the audio for them to check their answers.

AUDIO SCRIPT 2.17

The frequency of a sound is different from the loudness of a sound. The frequency is the rate at which a sound wave vibrates. Examples of low frequency sounds are a deep male voice, and the rumble of thunder during a storm. In contrast, examples of high frequency sounds are a squeaky door and a woman's high voice. There is a limited range of sounds humans can hear. Scientists have found that humans are more sensitive to low frequency sounds, and that high frequency sounds are harder to hear as people get older. Hearing loss is a part of the aging process: however, chronic exposure to loud sounds also contributes to hearing loss. Researchers have found that people who listen to an mp3 player continuously often suffer from hearing loss. They've also found that this can be prevented by turning off the music for about five minutes every hour. This brief rest allows the ears to recover from the sound.

ANSWERS

1 of	7 to
2 of	8 to
3 of	9 from
4 to	10 by
5 of	11 from
6 to	

- 2 Encourage the use of word + preposition combinations during the discussion. Circulate to make sure students are using the correct prepositions with the words.

EXTENSION ACTIVITY

Expand vocabulary by asking students to work in groups and think of as many combinations as they can with these prepositions: *of*, *to*, and *on*. Set a time limit for each preposition. Then ask students to write their lists on the board. Cross off any duplicates and award one point for every original (and correct) word + preposition combination formed. The team with the most points wins.

POSSIBLE ANSWERS

of: afraid, accuse, approve, take care, get rid, consist, disapprove, get tired, compose, hear
to: talk, subscribe, object, matter, happen, add, belong, dedicate, listen, respond
on: tell, depend, decide, comment, agree, rely, operate, insist, concentrate, base

SPEAKING Presentation of a plan for a public place

Grammar

Define cleft sentence as a complex sentence that highlights information by moving the most important information to the beginning of the sentence. Speakers use this so listeners will focus on the important information. Read the form and examples from the Grammar box aloud. This can be a challenging concept for students. Provide more examples if necessary: *It was my brother that we were looking for at the shopping center. It's Chinese food that I like better than any other. It was from the television that she heard the news about the country's new president. It was hearing about the university from the recruiter that convinced me to apply.* For advanced students, mention that cleft sentences can also begin with *Wh-* words: *What he wanted more than anything was to make the baseball team. What he hoped for was to find a job when he finished school.* Depending on your population, ask them if cleft sentences are used in their native languages. Clefts are used in French, Irish, some Semitic languages, Turkish, and Tagalog, for example.

- 1 Ask students to read the conversations with a partner and identify the cleft sentences.

ANSWERS

- 1 It was at the science center.
- 2 It's Wednesday she's coming.
- 3 It's the reading section that's difficult for me.
- 4 It's soft sounds that get to me.

- 2 Check answers after students complete the first conversation before asking them to go on to practice it, and then role play the other conversations. Circulate to make sure they are using cleft sentences.

EXTENSION ACTIVITY

Ask students to find a partner and write their own dialogues. Require that the dialogues include cleft sentences and word + preposition combinations. Schedule time for performances and consider videotaping the role plays as they are performed.

Pronunciation skill

Ask students to read the information in the *Using contrastive stress for emphasis* box, then read the examples aloud so they can hear how the different stress patterns change the focus of the sentence.

- 1 Play the audio and have students underline the stressed words. Play the audio more than once if necessary. After students listen to the audio, ask them to repeat the sentences using the same contrastive stress patterns. Circulate to check that students are properly using the stress pattern. Consider having students record themselves so they can compare themselves to the audio.

AUDIO SCRIPT 2.18

- 1 Low sounds actually affect us more than high sounds.
- 2 Our ears don't identify the sounds we hear, our brains do.
- 3 Jung complained about the noise, but it didn't bother Wei.
- 4 Adan was annoyed by his neighbor's radio, not by his TV.
- 5 Aida heard so many phantom rings that she ignored a real call.

ANSWERS

- 1 low, high
- 2 ears, brains
- 3 Jung, Wei
- 4 radio, TV
- 5 phantom, real

- 2 Tell students they will hear two pairs of sentences with different stress patterns and must choose the correct meaning for each one, based on the stress. Play the audio.

AUDIO SCRIPT 2.19

- 1 Ahmed's new ringtone is very annoying.
- 2 Ahmed's new ringtone is very annoying.
- 3 Ria was bothered by the traffic in the morning.
- 4 Ria was bothered by the traffic in the morning.

ANSWERS

- 1 b
- 2 a
- 3 d
- 4 c

Speaking skill

Ask students what they worry about most when they have to give a presentation. Expect answers such as nerves / anxiety, eye contact, pronunciation. Then focus attention on the time after a presentation. Many students worry about answering questions. Ask them why this may be. Point out that there are phrases they can use in English to deal with such questions. Ask them to read the information and examples in the *Fielding questions during a presentation* box.

- 1 Repeat the audio more than once if necessary before checking answers.

AUDIO SCRIPT 2.20

- 1 **A:** OK, Are there any questions?
A: Yes, what is "pitch"?
A: The question was: What is pitch? Pitch means how high or low a sound is.
- 2 **A:** What sound did you say is the most annoying?
B: You want to know what sound I said is the most annoying, correct?
- 3 **A:** Do some sounds become less annoying if we hear them every day?
B: That's a good question. I'm not sure.
- 4 **A:** That's all the information we gathered. Did you understand what I said about our group's conclusion?
B: Not exactly.

ANSWERS

- 1 Are there any questions; The question was
 2 You want to know
 3 a good question
 4 Did you understand

EXTENSION ACTIVITY

You could ask students to role-play the conversations in pairs. Challenge them to add two more lines to each one. Role plays can be performed in front of the class.

- 2 Put students into pairs to review one of the listening texts, and practice asking and fielding questions.

SPEAKING TASK**Cultural awareness**

Silence is the lack of sound. In some cultures, a moment of silence usually represents time for remembrance, thinking deeply, or meditating. Most cultures consider a moment of silence as a sign of respect for someone who has died or for a major historical event. Although public places are often crowded and noisy, some include quiet places for meditation or remembrance, such as war memorials in parks, city centers, or neighborhoods.

Draw students' attention to the box that details the audience, context, and purpose of the speaking task. Focus on the purpose and note that being able to apply ideas to the real world is an important academic concept.

Brainstorm and plan

Draw attention to the fact that this brainstorming and planning section again uses charts. Review the importance of these graphic organizers when working in academic studies. Ask students to think of at least four ideas for each category, but don't restrict them to this number. Remind them that the idea of brainstorming is quantity, and it never hurts to have more ideas to choose from.

Let students begin planning the park design by following the steps provided in the book. Remind them that visual aids are helpful and have them draw a picture about their design.

Speak and share

Ask students to present to other groups (or to the class). Encourage the audience members to ask questions. During this stage, monitor and take language notes.

Use the photocopyable unit assignment checklist on page 96 to assess the students' speaking. Allow time for groups to reconvene to compare the ideas that other groups had and to form a final conclusion.

STUDY SKILLS Revision strategies

Generate a discussion about revision; how much time it takes, its benefits, and its challenges. Put students into small groups to compile their answers. After an appropriate amount of time, ask students to write their answers on the board. Make a T-chart on the board with one side for benefits and one side for challenges. Ask a member from each group to add their ideas to the chart. Give students time to read the introductory information and address any questions they may have. Students will likely be familiar with revising in writing, but ask them how revision plays a role in other areas of academic study.

Give students time to complete the checklists individually. Hold a discussion with the whole class to elicit feedback to find out which suggestions were most popular with the students. Challenge students to choose two strategies to implement into their studies immediately. Check later to see how they are progressing.

Extra research task

Ask students to find out how a park can become a national park, which is a park that is owned by the government and protected from development. Challenge students to find one example of a national park, such as the Northeast Greenland National Park, which is the largest national park in the world, and provide some details about its history.