

Unit 5 INVENTIONS

GETTING STARTED

Computers and our lives



This unit includes:

LANGUAGE

Vocabulary

Words and phrases related to inventions

Pronunciation

Stress patterns: compound nouns and noun groups

Grammar

- The present perfect
- Gerunds and infinitives

SKILLS

- Reading for general ideas and specific information about natural world as inspiration for inventions
- Talking about inventions, their uses and their benefits
- Listening for specific information from an interview
- Writing about the benefits of an invention

COMMUNICATION AND CULTURE

Talking about inventions in Asian countries

1 Listen and read.

Phong: Dad, you promised to reward me if I passed the English test. Well, I did!

Phong's father: OK. What do you want – a laptop, a video game, an e-book reader, or a smartphone?

Phong: Wow, dad. You're so generous. My old mobile phone is still good. Um... the screen of an electronic book is rather small, so I think a laptop will be my choice.

Phong's father: What a wise choice, Phong! A laptop has lots of benefits. It's portable, so you can take it with you; it's economical, so we don't have to spend too much money; and it's very versatile, as it can do many things.

Phong: When you were my age, you didn't have a computer, did you?

Phong's father: Of course not. No emails, no online games, no Internet, no online shopping, no ...

Phong: How could you live without those things?

Phong's father: We did. But computers have really changed our lives. The computer is definitely one of the greatest inventions in the world. Now, tell me what you will do with your laptop.

Phong: I'll use it to listen to music, to chat with my friends, and to play games.

Phong's father: Is that all? How about for your studies?

Phong: Yeah... I'll use it for researching topics on the Web and typing my assignments as well.

Phong's father: Right. Use it wisely, and it will be your best friend.

OBJECTIVES

By the end of this unit, Ss can

- use words and phrases related to the topic *Inventions*
- understand the formation of compound nouns and their meanings
- Identify the stress patterns of compound nouns and noun groups
- use the gerunds and infinitives to talk about the uses or purposes of something
- use the present perfect tense to describe an event or action happening in the past but having a result in the present
- read a text about inventions based on nature for the main idea and specific information
- talk about some unique inventions, their uses and their benefits
- listen to an interview for specific information
- make an outline before writing a short paragraph about the benefits of an invention.

GETTING STARTED

Computers and our lives

Lead-In: Inform the class of the lesson objectives: getting to know the topic, vocabulary related to inventions, and two grammar points.

- 1 Ask Ss to look at the picture and tell them the two people in the picture are Phong and his father. Let Ss guess what Phong and his father are talking about.
 - Play the recording. Have Ss listen and read silently.
 - Tell Ss not to worry about the new vocabulary or grammar points. The new items will be dealt with after Activity 3.

2 Work in pairs. Ask and answer the questions.

1. What did Phong's father promise Phong?
2. Why doesn't Phong choose a smartphone as a reward?
3. Give evidence to support Phong's father's idea that computers have changed people's lives.
4. What will Phong use his laptop for?
5. Do you agree with Phong's father that Phong has made a wise choice? Why or why not?

3 Match each word with its definition.

1. generous	a. easy to carry around
2. portable	b. having many different uses
3. economical	c. kind and ready to give more (of something) than expected
4. versatile	d. giving good value for money

2 Below are parts of some other compound words. Match the first parts of the words with the second ones.

First part	Second part
1. pencil	a. machine
2. black	b. processor
3. washing	c. phones
4. head	d. case
5. food	e. board

LANGUAGE

Vocabulary

1 a. Use a dictionary to find the meanings of the following compound nouns and their parts. Write them in the appropriate columns.

Compound noun	Meaning of compound noun	Meaning of first part	Meaning of second part
1. video game			
2. smartphone			
3. laptop			
4. e-book			
5. email			

b. Discuss your findings with a partner. Is the meaning of each compound noun a combination of the meanings of its parts?



Pronunciation

1 Listen and repeat these words or phrases. Pay attention to their stressed syllables.

- | | | | |
|-----|-------------|-----|-------------|
| ● ● | black board | ● ● | blackboard |
| | white board | | whiteboard |
| | hot dog | | hot dog |
| | light house | | lighthouse |
| | running dog | | running dog |

2 Listen and tick (✓) the words you hear.

- | | | | |
|-----|---|-----|---|
| ● ● | 1. (a) green house <input type="checkbox"/> | ● ● | (b) greenhouse <input type="checkbox"/> |
| | 2. (a) soft ware <input type="checkbox"/> | | (b) software <input type="checkbox"/> |
| | 3. (a) gold brick <input type="checkbox"/> | | (b) goldbrick <input type="checkbox"/> |
| | 4. (a) moving van <input type="checkbox"/> | | (b) moving van <input type="checkbox"/> |
| | 5. (a) tall boy <input type="checkbox"/> | | (b) tallboy <input type="checkbox"/> |



- 2 This activity focuses on comprehension. Have Ss work in pairs to practise asking and answering the questions.

Key

1. He promised to reward Phong if Phong passed the English test.
2. Because his old mobile phone is still good.
3. Computers have changed our lives in many ways: faster communication (emails), free entertainment (online games), convenient shopping (online shopping), etc.
4. He will use his laptop for listening to music, chatting with friends, playing games, researching topics on the Web and typing his assignments.
5. (Answers may vary.)

- 3 This matching exercise helps Ss to guess the meanings of the words used in the dialogue. Ask Ss to use the context and clues in the dialogue.

Key 1. c 2. a 3. d 4. b

LANGUAGE

Vocabulary

- 1 Explain to Ss that the meaning of a compound noun is not always based on the meanings of its parts. Help them to use the dictionary to look for the meanings of five compound nouns and their parts.
- Prepare some pictures of a video game, a smartphone, a laptop, and an e-book reader for illustration, if Ss don't know these things.

Key a.

1. video game: a game in which players control and move images on a screen (**video**: film or image; **game**: something you play for fun)
 2. smartphone: a mobile phone that has some functions of a computer (**smart**: intelligent, computer-controlled; **phone**: a telephone)
 3. laptop: a portable, small computer that can work with a battery (**lap**: top part of your leg; **top**: upper surface)
 4. e-book: a book that is displayed on a computer screen or an electronic device (**electronic**: using microchips to control a small electric current; **book**: a written work)
 5. email: a way of sending messages to other people by using a computer (**electronic**: using microchips to control a small electric current; **mail**: post, letters)
- b.** No, not always (e.g. laptop)

- 2 The focus of Activity 2 is on the formation of compound nouns (N + N, Adj + N, or V-ing + N). Tell Ss that some compound nouns are written as one word (e.g. *bedroom*), some as two words (e.g. *swimming pool*), and some with a hyphen in between (e.g. *mother-in-law*).

Key

1. **d** pencil case
2. **e** blackboard
3. **a** washing machine
4. **c** headphones
5. **b** food processor

Pronunciation

Activities 1 and 2 focus on the stress patterns of compound nouns (primary stress is usually on the first part) and noun groups (primary stress is on the second part).

- 1 Model the pronunciation (or play the recording) for Ss to repeat chorally and individually.
- 2 Ask Ss to listen and tick the words that they hear.

Audio script

1. GREENhouse
2. soft WARE
3. gold BRICK
4. MOVING van
5. tall BOY

Key 1. b 2. a 3. a 4. b 5. a

Notes

If necessary, T may explain the meanings of the compound nouns and noun groups in 1 and 2.

Noun groups	Noun phrases
black board : a board that has the black colour	blackboard : a large board with a smooth black or dark green surface that teachers write on with a piece of chalk
white board : a board that has the white colour	whiteboard : a large board with a smooth white surface that teachers write on with a marker
hot dog : a dog that feels hot	hot dog : a hot sausage that is served in a long bread roll
light house : a house that is full of light	lighthouse : a tower that contains a strong light to guide ships
running dog : a dog that is running	running dog : a dog used for racing
green house : a house that has the green colour	greenhouse : a building with glass walls and roof for growing plants in
soft ware : objects that are soft	software : the programmes used to operate a computer
gold brick : a brick made of gold	goldbrick : a person who is lazy and tries to avoid work by pretending to be ill
moving van : a van that is moving	moving van : a large van used for moving furniture from one house to another
tall boy : a boy that is tall	tallboy : a tall piece of furniture with drawers to store clothes in

Grammar

Gerunds and infinitives

1 Complete the definitions or uses of the inventions using the correct forms of the verbs given (*V-ing* or *to-Infinitive*).

1. A laptop or a smartphone can be used for (get) _____ access to the Internet or (send) _____ messages.
2. You can use social networking sites (create) _____ your personal profile and (contact) _____ other people.
3. When you're tired of carrying lots of books or novels when you travel, an e-book reader may help – it is used (read) _____ electronic books, newspapers or magazines.
4. If you want to relax without using a smartphone with a small screen or a bulky laptop, you can use a handheld video game device (play) _____ computer games.
5. A food processor is used for (chop) _____ up or (mix) _____ food.
6. We can use a USB stick (store) _____ a lot of music or video files.

2 Think of an item in your classroom or house. Describe it to a partner, using a gerund or an infinitive. See if your partner can guess what it is.

Example:

Student A: This is used for making clothes clean.

Student B: Is it a washing machine?

Student A: That's right.

Do you know ...?

We can use gerunds and infinitives to describe the purpose of something

- * Infinitive: use sth. / sth. is used + to-infinitive
- * Gerund: for + V-ing

Examples:

A ruler is used to draw straight lines.
A ruler is used for drawing straight lines.
We can use a ruler to draw straight lines.

The present perfect

1 Label the timelines below with the words from the box.

past present future present perfect



2 Match the beginnings in A with the ends in B. Put the verbs within brackets in the present simple or the present perfect.

A Beginnings	B Ends
1. Kim (break) her arm,	a. 'Me too.'
2. He (look) unhappy	b. so she can't play badminton.
3. 'You (know) that woman?'	c. so all the valuables in it (disappear).
4. 'I (ask) for help from the teacher.'	d. because he (lose) all his money.
5. He (leave) the desk unlocked,	e. 'I do, but I (forget) her name.'

3 The following paragraph is about the importance of computers. Choose the correct verb tense.

Life without computers (1) seems / has seemed simply impossible now. Computers (2) affected / have affected every aspect of our lives. Since the time they (3) were / have been invented, computers (4) encouraged / have encouraged great technological progress in different fields. Along with computers, the Internet (5) aids / has aided the developments in technology. However, many people argue that computers (6) killed / have killed physical contact between people. For example, teenagers now (7) prefer / have preferred chatting on the computer to meeting face to face. Do you agree?

Do you know ...?

The present perfect describes an event or action happening in the past but having a result in the present.

* Has / Have + past participle

Grammar

Gerunds and infinitives

- 1 Explain to Ss that *V-ing* (after the preposition FOR) or *to-infinitive* is used to describe the use or purpose of something.

Key

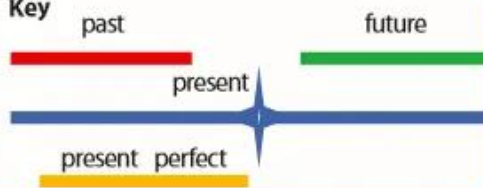
- | | |
|---------------------|----------------------------|
| 1. getting; sending | 2. to create; (to) contact |
| 3. to read | 4. to play |
| 5. chopping; mixing | 6. to store |

- 2 This activity encourages Ss to use the gerund or infinitive to describe things around them (e.g. school things such as an eraser, a pen, or a calculator; things at home such as a bookshelf, a rice cooker, or a fridge).
- First, have two Ss model the example. Then, divide the Ss into pairs and let them do the activity.

The present perfect

- 1 The timelines help Ss to have a deeper understanding of the uses of the present, past, and future tenses – with more focus on the present perfect.
- Draw the timelines on the board and explain to Ss that they should write a word from the box above each line.
 - Have a student come to the board and write the answers in the timelines.

Key



- 2 The focus of this activity is the distinction between the present simple and the present perfect.

- Ask Ss to match the beginnings in A with the ends in B to make meaningful sentences or exchanges.
- Help Ss to use the correct verb tense in each case.

Key

1. **b** has broken
2. **d** looks; has lost / lost
3. **e** Do you know; have forgotten / forget
4. **a** have asked
5. **c** left; have disappeared

- 3 This activity aims to help Ss to distinguish uses of the present perfect, the present simple and the past simple tenses. Have Ss do the activity individually and then check the answers as a class.

Key

- | | |
|--------------|--------------------|
| 1. seems | 2. have affected |
| 3. were | 4. have encouraged |
| 5. has aided | 6. have killed |
| 7. prefer | |

Notes

- The present simple is used for a general fact (1, 7).
- The past simple is used for a past action or event (3).
- The present perfect is used for a past action or event with a result extending to the present (2, 4, 5, 6).

LESSON OUTCOME

- Ask Ss: *What have you learnt today? What can you do now?*
- Elicit answers: *I can pronounce the compound nouns with the correct stress pattern. I can talk about the uses of things around me. I can distinguish the present simple, the past simple, and the present perfect.*

SKILLS

Reading

Wonderful nature

1 What can the animals or the leaves in the pictures do that people can't? Name some things people have invented to make up for what they cannot do. Discuss your ideas with a partner and then read the text.



People often use the natural world as inspiration for their inventions. By observing animals and plants, they design new products to serve humans. Here are some examples.

Animals can do many things humans cannot, like flying or staying underwater for a long time. The aeroplane, with its wings and shape imitating those of a bird, is one of the greatest inventions in our history. Thanks to it, people can travel long distances in the air. This has helped to develop trade and tourism. The submarine, which can travel underwater, imitates a dolphin's shape. Submarines are very useful for scientists to learn about the undersea world.

Plants around us are also great sources of ideas for other wonderful inventions. The self-cleaning glass window and the fabric used to make umbrellas are both inspired by the smooth leaves of a lotus plant, with their ability to wash away dirt in the rain. Another product is Velcro. This hook-and-loop fastener was invented after a Swiss engineer observed how the seeds of a plant clung to his clothing. He then made two fabrics stick together thanks to the hooks on one surface and the loops on the other. Since then, Velcro has gradually become a familiar fastener for shoes, jackets, and even spacesuits.

It is definitely true that nature has inspired numerous inventions and technologies. Scientists and inventors have tried to imitate something in nature in an effort to create better, stronger, safer tools and devices for our everyday life.



2 What is the most suitable title of the text?

- a. Mother Nature
- b. Imitating Nature
- c. Greatest Inventions

3 Match the words with their meanings.

1. inspire	a. cloth or material for making clothing, curtains, etc.
2. fastener	b. give someone a desire to do something well
3. fabric	c. thread or fibre with a curved end
4. hook	d. special clothing for an astronaut
5. loop	e. device used to close a piece of clothing
6. spacesuit	f. thin thread or fibre in the shape of a circle

4 Answer the questions about the text.

- 1. What are the inventions that imitate animals?
- 2. What are the inventions that imitate plants?
- 3. Why is the aeroplane considered one of the greatest inventions in our history?
- 4. What can help scientists to learn about life under the sea?
- 5. How can a glass window clean itself?
- 6. Find the words or phrases in the text that can describe an aeroplane, a submarine, and Velcro.

5 Which of the four inventions mentioned in the text is the best imitation of nature? State your reasons.

SKILLS

Reading

Wonderful nature

Lead-In: Draw Ss' attention to the heading of the Reading section: *Wonderful nature*. Ask them to guess what the text might be about.

- 1** Have Ss work in pairs to discuss what the animals in the pictures can do but people can't. Ask Ss questions to help them think of some devices or equipment that people have created to allow them to do what they normally cannot (e.g. *As people cannot fly, what have they made to help them fly?*).

Key

Picture a: A bird can fly.

Picture b: A dolphin can swim and stay underwater for a long time.

Picture c: A lotus leaf does not get wet. It washes water away.

People have invented an aeroplane, a ship or submarine, and a waterproof raincoat to make up for what they cannot do as well as these animals or leaves.

- 2** Ask Ss to read the text quickly and pick out repeated words or phrases (e.g. *inventions / invent, imitating / imitates, inspiration / inspired*). Tell them that repeated words in a text may reveal its main idea or general title.

- Have Ss skim the text and choose the best title from three options.

Key

b. Imitating Nature

- 3** Ask Ss to read the text again and underline the six words from **1**. Encourage Ss to guess the meanings of these words from context and match them with the correct definition.

Key

1. b	2. e	3. a
4. c	5. f	6. d

- 4** Ask Ss to answer the questions individually. Tell them to underline the key words in the questions and the relevant words or phrases in the text.

Key

1. The inventions that imitate animals are the aeroplane and the submarine.
2. The inventions that imitate plants are Velcro, the self-cleaning glass window and umbrella fabric.
3. The aeroplane is considered one of the greatest inventions in our history because it helps us to travel long distances in the air and encourages the development of tourism and trading.
4. A submarine can help scientists to learn about life under the sea.
5. The material that makes up the glass window has the ability to wash away the dirt in the rain.
6. *An aeroplane:* 'its wings and shape imitating those of a bird'
A submarine: 'imitates a dolphin's shape'
The Velcro: 'hook-and-loop fastener'; 'two fabrics sticking together thanks to the hooks on one surface and the loops on the other'

Notes

The name 'Velcro' is a derivation from the French words *Velours* (velvet) and *Crochet* (hook) and was registered as a trademark on May 13, 1958.

- 5** Let Ss work in groups of 3 or 4 to discuss the question and decide which of the four inventions is the best imitation of nature. Remind Ss that the invention they choose needs to be very similar to the related animal or plant in appearance or function.

LESSON OUTCOME

- Ask Ss: *What have you learnt today?*
- Elicit answers: *I have learnt about how animals and plants in nature can inspire inventors to create useful devices or equipment to make our life easier and more comfortable.*

Speaking

Unique inventions

1 Practise the conversation with a partner.

Mal: What's that machine, John? It looks like a printer but a bit bigger and heavier.

John: It's a 3-D printer. I've just bought it.

Mal: 3-D printer? What's it used for?

John: Well ... It's used for producing solid objects similar to the originals.

Mal: Really? For example?

John: You can make things like a cup, a spoon, or even a toy car.

Mal: Fantastic. Does that mean I can make my own things at home and save lots of money?

John: That's right.

2 Complete the table with the information about the invention mentioned in the conversation above.

a. Name of invention	
b. Characteristics	bigger and heavier than a normal printer
c. Use	
d. Benefits	

3 Discuss two more inventions with a partner. Complete the table below with the phrases in the box.

- not costly
- environmentally-friendly
- easy to use
- not dependent on electricity
- easy to carry
- easy to transport files



a. Name of Invention	portable solar charger	USB stick
b. Characteristics	small, portable	small, portable
c. Use	charge mobile devices (mobile phones, cameras, and laptop)	store data (audio or video files)
d. Benefits	-	-

4 Work with a partner. Choose one invention mentioned in 3 and make a similar conversation as in Activity 1. You can use the information in the table or your own ideas.

5 Work in groups. Choose one of the inventions below and prepare a talk to introduce it to other group members.

- laptop
- e-book reader
- food processor



Speaking

Unique inventions

Lead-in: Inform the class of the lesson objectives: talking about inventions.

- 1 Ask Ss what they think the heading of the speaking section *Unique inventions* means.

Suggested answers

Very special or unusual inventions.

- Ask Ss to practise the conversation in pairs.
- 2 Have Ss complete the table with the information from the conversation. Explain to them that the four ideas suggested in the table are the key points they need to mention when talking about an invention.

Key

a. Name of invention	3-D printer
b. Characteristics	bigger and heavier than a normal printer
c. Use	to produce solid objects similar to the originals
d. Benefits	economical (saving lots of money)

Notes

A 3-D printer is a machine that can produce three dimensional solid objects. The printing process is similar to the process of making a multi-layer cake: The printer produces layer after layer of the model object until the final product is formed. Some companies are using this printer to produce a prototype of products (e.g. shoes) and make changes before manufacturing the 'real' products. The common material used in a 3-D printer is thermoplastic (a kind of flexible plastic that becomes hard when it cools).

- 3 Ask Ss to look at the pictures of a portable solar charger and a USB stick (or flash drive) and discuss which benefits (suggested in the box) are suitable for each invention.

Key

Portable solar charger: not dependent on electricity; environmentally-friendly; easy to carry, not costly

USB stick: not costly; easy to use; easy to transport files

Note: Some benefits can be suitable for both inventions: easy to use, easy to carry, not costly

- 4 Ask Ss to use the information in the table (in 3) and talk about one invention. Tell them that they can make some changes in the sample conversation (from 1) to make their own conversation natural and logical.
- 5 Put Ss in groups of 4 or 5. Each group chooses one invention and discusses which information they may use to introduce the invention to other groups. Their talk should include information about the characteristics, use, and benefits of the invention.

OR ask Ss to think about any other inventions, choose one, and talk about it.

LESSON OUTCOME

- Ask Ss: *What have you learnt today? What can you do now?*
- Elicit answers: *I have learnt about some new and unusual inventions. I can talk about their characteristics, uses, and benefits.*

Listening

Flying cars

1 Look at the picture and discuss with a partner what this flying car (or aerocar) can and cannot do.



2 Listen to an interview with Mr Brown, a spectator at a test flight of a flying car. Tick the words or phrases that you hear.

- | | | | |
|----------------------|--------------------------|---------------|--------------------------|
| - traffic jams | <input type="checkbox"/> | - collapsible | <input type="checkbox"/> |
| - traffic congestion | <input type="checkbox"/> | - collapse | <input type="checkbox"/> |
| - gallon | <input type="checkbox"/> | - runaway | <input type="checkbox"/> |
| - garage | <input type="checkbox"/> | - runway | <input type="checkbox"/> |



3 Listen and answer these questions.

1. Where is the test flight taking place?
2. What does Mr Brown do?
3. Why is he interested in the test flight?
4. What does Mr Brown like about the flying car?
5. What is the biggest problem with this flying car?

4 Listen again and complete the information about the flying car. Write one word or number in each gap.

1. size: a little bit _____ than a normal car
2. petrol consumption: _____ gallon(s) per hour in the air
_____ gallon(s) per 50 km on the ground
3. speed: _____ km per hour in the air
_____ km per hour on the ground

5 Do you want to own a flying car like Mr Brown? Why or why not? Is there a way to solve the problem with the car that Mr Brown discusses?



Listening

Flying cars

Lead-in: Inform the class of the lesson objectives: listening for specific information.

- 1 Ask Ss to look at the picture and answer the guiding questions.
 - a. What does this flying car have on both sides of its body? Does it have wheels?
 - b. Can it fly? Can it run on the ground? Can it move in water?
 - 2 Before Ss listen to the recording, ask them to look at 8 words in Activity 2. Explain the meanings of the words they do not know.
- Have Ss listen and tick the words they hear.

Audio script

Reporter: Excuse me; I'm from the ABC Discovery Channel. May I ask you a few questions?

Mr Brown: Sure.

Reporter: Your name is

Mr Brown: Eric Brown.

Reporter: Yes, Mr Brown. Why are you interested in this test flight in New York City?

Mr Brown: Well ... I'm a businessman here in this city. You see... there are quite a lot of traffic jams during the rush hours. I guess owning a flying car like this might be a good idea.

Reporter: I see. What do you like about this car?

Mr Brown: It's not... not too big, just a little bit bigger than a normal car. So when its wings collapse, it fits quite well in any garage. Second, it doesn't use too much gas – just five gallons per hour in the air and one gallon per 50 km on the ground.

Reporter: How about its speed?

Mr Brown: It's OK. It can reach 120 km per hour on the ground and nearly 200 in the air.

Reporter: Anything you don't like about it, Mr Brown?

Mr Brown: Yes. It needs a runway. That's the biggest problem. What happens if it gets stuck in traffic and cannot take off?

Reporter: Yeah... Thank you very much for spending time with us...

Key

traffic jams; collapse; garage; gallon; runway

- 3 Ask Ss to listen again and answer the questions.
 - Encourage Ss to take notes. Remind them that notes are key words and ideas that can be written down quickly.
 - Have Ss compare their answers with their partners'.

Key

1. In New York City.
2. He's a businessman.
3. He's considering owning a flying car to deal with the traffic problem.
4. It's not too big, so it can be put in a garage.
5. This flying car cannot take off without a runway.

- 4 This task focuses on specific information about the flying car. Ask Ss to guess what kind of information they may put in the gaps.

Key

1. bigger
2. 5 (in the air); 1 (on the ground)
3. 200 (in the air); 120 (on the ground)

- 5 Ask Ss to discuss in pairs whether or not they want to own a flying car. Draw their attention to the problem with the flying car (e.g. in need of a runway).

Suggested answers

A possible solution to the problem: Making it leave the ground like a helicopter.

LESSON OUTCOME

- Ask Ss: *What have you learnt today?*
- Elicit answers: *I have learnt about an invention – the flying car. I have practised listening for details and taking notes.*

Writing

How good is it?

- 1 Which of these audio devices do you have or want to have? Discuss with a partner.



speakers



headphones



earbuds

- 2 The following text is about earbuds and their three benefits. Below it are the details supporting each benefit. Put the details in the appropriate gaps.

Most young people have a pair of earbuds with them when they go out. When connected to a portable media player or a mobile phone, earbuds help you listen to music or audio lessons. What are their benefits?

First, a pair of earbuds is small and light, so it is portable.

1. _____

Second, earbuds are not costly. They are not as expensive as a set of speakers.

2. _____

Finally, you can use earbuds to listen to music or your listening lessons anywhere, even in public places.

3. _____

- a. With about 100,000 VND, you can get a pair. Of course, you have to pay more for those of higher quality.
- b. Only you can hear the sounds from the media player or mobile phone. Nobody is disturbed.
- c. Earbuds are not bulky. You can put them in your bag or even your pocket.

- 3 Complete the following outline for the paragraph on earbuds in 2.

a. Topic: *The benefits of earbuds*

b. Thesis sentence: _____

c. Supporting idea 1 and further explanation: *small, light, portable => put in a bag or pocket*

Supporting idea 2 and further explanation:

Supporting idea 3 and further explanation:

- 4 Choose one invention and write a similar paragraph about its benefits.

Benefits of a smartphone

- a. for communication: make phone calls, send & receive messages
- b. for entertainment: listen to music, play games
- c. for information: surf the Web, use maps to look for places

Benefits of a digital camera

- a. portable: light, small, not bulky
- b. convenient: quick to view and delete photos; easy to store and transfer photos to a computer
- c. economical: no money spent on film

Writing

How good is it?

Lead-in: Inform the class of the lesson objectives: writing a paragraph with details or examples as supporting ideas.

1 Have Ss work in pairs and discuss whether or not they have any of the audio devices illustrated by the pictures. Encourage them to extend their discussion to the benefits of each kind of device (e.g. The speakers can produce sounds loud enough for everybody in a large room to hear; headphones and earbuds do not disturb other people when you listen to music; earbuds are more convenient than headphones because they are smaller in size).

Notes:

Headphones (B.E.) = earphones (A.E)

- 2** The focus of this task is on how to develop a paragraph. Explain to Ss that one way to support an idea in a paragraph is to give further explanation or an example.
- Ask Ss to read a paragraph about the benefits of earbuds and match the details with the benefits.

Key

1. c 2. a 3. b

3 Have Ss read the paragraph about earbuds again and complete the outline of this paragraph. Help Ss to analyse the structure of a paragraph step by step.

Key

- Topic: The benefits of earbuds
- Thesis sentence (Topic sentence): What are its benefits?
- Supporting idea 1 and further explanation: small, light, portable → put in a bag or pocket
Supporting idea 2 and further explanation: not costly → about 100,000 VND
Supporting idea 3 and further explanation: used anywhere → will not disturb anybody

4 Put Ss into groups of three or four. Ask them to choose one invention and discuss what they will write about. Encourage Ss to make complete sentences about the benefits of the invention they have chosen.

- Call on some Ss to suggest their group's thesis sentence and the benefits of the invention aloud. Correct Ss' mistakes in grammar or word choice.
- Have Ss work independently and write their own paragraphs.
- Choose one or two paragraphs and ask the whole class to give comments and corrections.

LESSON OUTCOME

- Ask Ss: *What have you learnt today? What can you do now?*
- Elicit answers: *I have learnt about how to write a complete paragraph with supporting ideas. I can write about the benefits of an invention.*

COMMUNICATION AND CULTURE

Communication

Discussion

1 In groups, vote for the best invention among those in the list below. The best invention needs to meet the four criteria listed in the voting sheet. Tick (✓) the appropriate boxes.

Voting sheet

		useful to a lot of people	not expensive	easy to use	available / easy to buy
1.	solar charger				
2.	digital camera				
3.	3-D printer				
4.	laptop				
5.	smartphone				
6.	television				
7.	washing machine				

2 Report and explain your group's results to the whole class.

Example:

We vote for digital cameras because they are very useful. We use them to take pictures of people we spend time with or beautiful places we visit. What's more, a digital camera does not cost too much, and we don't have to buy rolls of film for it...

Culture

1 Do you know which countries these inventions are from? Match the country names with the inventions.

Countries	Inventions
1. China	a. medical incubator
2. Japan	b. PC sound card
3. Singapore	c. chopsticks
4. The Philippines	d. instant noodles



2 Read the text and answer the questions.

There is quite a long list of important inventions from Asian countries that help people. The Chinese invented paper, chopsticks and gun powder. The Japanese invented instant noodles and video games. In many Southeast Asian nations, agriculture is the main economic activity and pollution is a major problem. That is why there have been other important inventions to deal with these issues. Thai people, for example, have contributed to environmental protection and benefited farmers, who depend on water for their crops. Below are three significant inventions from a well respected Thai inventor, King Bhumbol Adulyadej.

The king's Chaipattana Aerator was patented in 1993 and has won several international awards. This is a kind of paddle-wheel machine that helps to add oxygen to the wastewater to 'clean' it before it is reused for farming.

In 1999 and 2003, he obtained Thai patents for his rain-making techniques. In addition to helping agriculture directly, these techniques have helped to increase the volume of water in rivers and streams and improved forest conditions.

The king's biodiesel oil project was first introduced in 2001. Its aim is to turn palm oil into biodiesel as an alternative source of energy. Biodiesel is a good choice for an alternative fuel, at a time when Thailand needs to reduce its use of fossil energy to protect the environment.

Questions

1. What are the main issues of many Southeast Asian countries?
2. Write the names of the inventions under the pictures.



a. _____ b. _____ c. _____

3. Which inventions have directly benefited farmers?
4. Which inventions have helped to protect the environment? Pick out information from the text to support your answer.
5. In your opinion, which of the three inventions from Thailand mentioned in the text is the most important? Why?

COMMUNICATION AND CULTURE

Lead-In: Inform the class of the lesson objectives: further skill development.

Communication

- 1 Ss have more chances to practise speaking. Explain to Ss that they need to consider all four criteria when voting for the best invention. To give Ss more freedom, allow them to choose another invention not mentioned in the list.
- 2 Have Ss prepare a talk about the best invention. Their talks should have strong arguments to persuade the audience.

Culture

- 1 Ask Ss to look at the pictures and discuss with a partner what the inventions are for. Then have them guess which countries these inventions are from.

Key

1. China: (c) chopsticks (for picking up food)
2. Japan: (d) instant noodles (eaten when you don't have much time to prepare the meal)
3. Singapore: (b) PC sound card (for putting into a computer to allow the use of sound with multimedia software)
4. The Philippines: (a) medical incubator (for keeping a newborn baby warm)

- 2 Tell Ss some important information about King Bhumibol Adulyadej. Ask Ss if they know the meaning of 'patent'. Explain to them that an inventor needs to get a patent for his invention to protect his/her idea.
- For more advanced classes, extend the activity by letting Ss discuss whether there are patents in Viet Nam.

Notes:

King Bhumibol Adulyadej was born in Massachusetts, USA, where his father was studying at Harvard University (in 1927). He studied in Switzerland from 1933 to 1945 before returning to Thailand. In the years following, he began what has become his way of life – travelling throughout the year to the provinces and rural areas of the kingdom to visit his people, talk to them and, perhaps even more important, listen to them. He learns their needs and their problems and then tries to find a way of giving immediate help. He is the longest-reigning monarch in the world today (from 1946).

- Ask Ss to read the text and answer the questions.

Key

1. The two issues are agriculture development and environmental protection.
2. a. rain-making technique; b. biodiesel; c. Chaipattana Aerator
3. Chaipattana Aerator and rain-making techniques.
4. All three inventions have helped to protect the environment: Chaipattana Aerator → cleans wastewater; rain-making techniques → improves forest conditions; biodiesel → reduces the use of fossil energy
5. (Answers may vary.)

LESSON OUTCOME

- Ask Ss: *What have you learnt today?*
- Elicit answers: *I have improved my speaking and reading skills. I have discovered more about some inventions from Asia.*

LOOKING BACK

Pronunciation

- 1 These words below are compound nouns or noun phrases. Put them in the correct columns according to their stress patterns. The first one in each column is an example.

food processor	correction pen
laptop	digital camera
earbuds	solar charger
washing machine	runway
smartphone	

● ●	● ●
food processor	solar charger

- 2 Listen and repeat these words.

Vocabulary

Complete these sentences using the words given in the box. Make changes where necessary.

invention portable
economical expensive benefit

- A digital camera is more _____ than a film camera: You don't have to buy rolls of films.
- Our teacher gave us an assignment on modern _____ of the 21st century.
- Modern inventions tend to be small and _____, so they can be taken along and used everywhere.
- Even the best invention may have both _____ and drawbacks.
- It's difficult to look for products of high quality which are not _____.

Grammar

- 1 Read the following short exchange. Fill in the gaps with the present perfect or the present simple forms of the verbs in brackets.

Kim: Help me, Eric. My party (1. be) _____ next week and I (2. not plan) _____ the menu yet. I (3. waste) _____ three days worrying, and I still (4. not have) _____ any ideas. What should I do?

Eric: Don't panic. Your guests (5. not start) _____ arriving yet, so ask everyone to bring something. Then you can order some pizzas or buy spring rolls from a Vietnamese takeaway. Nobody (6. say) _____ no to pizzas or spring rolls, I'm sure.

- 2 Answer these questions, using the gerund or infinitive forms of verbs to describe functions or purposes.

- What is a washing machine used for?
- What can a solar charger be used for?
- What do you use to listen to music and watch videos?
- What is a correction pen used for?
- What do you use a 3-D printer for?



LOOKING BACK

Lead-in: Inform the class of the lesson objectives: reviewing pronunciation, vocabulary, and grammar.

Pronunciation

- 1 Ask Ss to pick out compound nouns and put them in the first column. The other words are noun groups and are put in the second column. Help Ss to review the stress patterns of compound nouns and noun groups.

Key

See audio script below.

- 2 Play the recording. Have Ss listen and repeat.

Audio script

- ● food processor, smartphone, laptop, washing machine, earbuds, runway
- ● solar charger, correction pen, digital camera

Vocabulary

The five words in the box are the most commonly used ones in the unit. Have Ss put them in the gaps of the five sentences.

Key

- | | |
|---------------|---------------|
| 1. economical | 2. inventions |
| 3. portable | 4. benefits |
| 5. expensive | |

- Extend this task by asking Ss to make their own sentences with these words.

Grammar

- 1 Have Ss read the exchange once to grasp the general idea. Then have them work with a partner and discuss which verb form should be used in each gap.

Key

- | | |
|--------------------|--------------------|
| 1. is | 2. haven't planned |
| 3. have wasted | 4. don't have |
| 5. haven't started | 6. says |

- 2 The focus of this task is on using the gerund or infinitive forms in the answers to describe functions or purposes of things. It also helps Ss to review the uses of some inventions mentioned in the previous sections.
- First, have Ss do the exercise individually. Then ask them to work in pairs to practise asking and answering the questions.

Key

1. A washing machine is used for washing clothes.
2. A solar charger can be used for charging mobile devices.
3. I use a laptop (smartphone, Ipad,...) to listen to music and watch videos.
4. A correction pen is used for covering a writing error.
5. I use a 3-D printer to produce / make solid objects. (OR: ... for producing solid objects.)

LESSON OUTCOME

- Ask Ss: *What have you learnt today? What can you do now?*
- Elicit answers: *I can pronounce the compound nouns and noun groups with correct stress patterns. I can use the gerund and infinitive to describe the uses of objects. I can use the present perfect to talk about actions happening in the past but having the results in the present.*

PROJECT

1 Think about an imaginary invention that may be useful to you or other people. Consider these questions:

1. What is it used for?
2. Who can use it?
3. Where may it be used?
4. Is it expensive?
5. Is it easy to use?

2 Work in groups. Describe your invention to your group members. Which invention is the best in your group?



3 Your group is going to take part in the contest 'Best Invention of the Year' organised by your school. To get ready for this contest, design a poster about the best invention from Activity 2.

NOW YOU CAN

- ▶ Talk about inventions, their use and benefits
- ▶ Pronounce compound nouns with correct stress patterns
- ▶ Describe things using gerunds and infinitives
- ▶ Use the present perfect tense to describe an action happening in the past but having a result in the present
- ▶ Write about inventions

PROJECT

Lead-in: Inform the class of the lesson objectives: free practice in groups.

- 1** In this activity, Ss are free to create their own invention – something they have wished to have.
 - To inspire Ss' imagination, give some examples of imaginary inventions based on objects owned by the characters in a cartoon or story: *Harry Potter's invisibility cloak*, *Doraemon's magic pocket*, *Aladdin's magic lamp*, etc.
- 2** Ask Ss to work in groups and have each student present his / her own invention. Then ask the group to select the best invention.
- 3** Let Ss look at the sample poster of a smartphone. Draw Ss' attention to the information they should give in the poster.
 - Ask Ss to work together to design a poster on a large-sized sheet of paper.
 - Have the groups hang their posters on the wall, and all Ss vote for the best invention of their class.

LESSON OUTCOME

- Ask Ss: *What have you learnt today? What can you do now?*
- Elicit answers: *I can design a poster about an invention. I have learnt to cooperate with others in doing some learning tasks. Our creativity is developed.*