

Unit

1

Changing the world

Lesson	Objectives/Outcomes
The top products of mechanical engineering Pages 6–7	<ul style="list-style-type: none">◆ Be aware of, and arouse interest in, the topics of the unit◆ Produce sentences with <i>be</i> about engineering devices◆ Understand and practise target vocabulary: machines, vehicles◆ Say numbers 1–10 with better pronunciation
What is engineering all about? Pages 8–9	<ul style="list-style-type: none">◆ Recognize singular and plural nouns in spoken sentences◆ Use slides when listening to a short talk about engineering◆ Understand and practise target vocabulary: areas of engineering
Singular or plural? Page 10	<ul style="list-style-type: none">◆ Spell and pronounce plurals of target vocabulary for the unit◆ Use singular and plural forms of <i>be</i> in sentences and questions about machines and devices
Hello, everyone! Page 11	<ul style="list-style-type: none">◆ Use sentences with <i>be</i> to introduce a talk about yourself◆ Speaking: giving a simple introduction to a talk, including getting attention◆ Say short forms of <i>be</i> in sentences about yourself
English in action: Numbers and units of measurement Pages 12–13	<ul style="list-style-type: none">◆ Say numbers 11–99 with better pronunciation◆ Say measurements◆ Produce vocabulary and language from the lesson to complete an information-gap activity
A case study Pages 14–15	<ul style="list-style-type: none">◆ Identify text types before reading◆ Identify the subject of SVC/SVO sentences◆ Read a text in order to answer research questions and understand new words◆ Be familiar with some of the features of an information text in an encyclopedia, in print or online◆ React to information in a text
Driving into the future Pages 16–17	<ul style="list-style-type: none">◆ Understand and practise target vocabulary: petroleum cars and electric cars◆ Writing subjects of mainly SVC sentences
Over to you!	<ul style="list-style-type: none">◆ Consolidate language and new knowledge from the unit in freer, independent activities◆ Use target vocabulary and language from the unit in a communicative activity◆ Use all four skills to complete a project on the topic of the unit◆ Demonstrate understanding of content of the unit◆ Revise vocabulary from the unit

The top products of mechanical engineering

Be aware of, and arouse interest in, the topics of the unit

Produce sentences with *be* about engineering devices

Understand and practise target vocabulary: machines, vehicles

Say numbers 1–10 with better pronunciation

Introduction

Write the title of the lesson on the board: *The top products of mechanical engineering*. Ask: *What are the top products?* If students are struggling, give some examples of products. Elicit answers, but do not confirm or correct.

Show students the pictures of the ten products in their books, and explain these are all *products*.

Ask: *Do you know these products?* Students should say *Yes*.

A

1. Set the exercise for pairwork. Elicit answers from a few students, but do not confirm or correct.
2. 🎧 Play the recording. Feed back by saying a number and getting students to say the product. After going through once in order, repeat at random, e.g., T: *h*. Ss: *a fridge*; T: *e*. Ss: *a tractor*. Insist on students saying the article with the noun in each case.
3. 🎧 Write *a television* on the board and then say the phrase. Show that the stress is on the first syllable of *television*. Set the exercise and play the recording. Students compare answers in pairs. Feed back. Drill the words, chorally and individually, checking individual sounds as well as stress. Deal with any general pronunciation problems if you have a monolingual class.

Answers & Transcript 🎧 001

- a car
- a plane
- a television
- a computer
- a tractor
- a telephone
- an air conditioner
- a fridge
- a tap
- a boiler

B

Explain *Number 1*. Mime 'at the top'. If possible, explain (in L1) that these are the top ten products of mechanical engineering from an engineering website.

1. Set the exercise. Put students in pairs to discuss. Write some language on the board, e.g., *I think it's the computer. I'm not sure*. Point out that students must use *the* when they are answering this question.
2. 🎧 Play the recording.
3. Have a general discussion about this. Drill: *I agree./I don't agree*.

Answers

1. Students' own answers.
2. **Answers & Transcript 🎧 002**
Number one is the computer.
Number two is the fridge.
Number three is the tap.
Number four is the boiler.
Number five is the tractor.
Number six is the car.
Number seven is the plane.
Number eight is the telephone.
Number nine is the air conditioner.
Number ten is the television.
3. Students' own answers.

NOTE This is just one list from subscribers to an engineering website. You might like to get students to research the current list on the internet.

C

This exercise introduces the idea of *machines* and *vehicles*. These words are used throughout the course.

Set the exercise and go over the example. Make sure students can pronounce the words with the correct stress: *vehicle* – note the letter *h* is not sounded in this word; *machine*.

Monitor while students are working in pairs. Do not elicit answers.

🎧 Play the recording. Students check their answers. Go over any words or answers students had difficulty with.

Answers & Transcript 🎧 003

- A car is a vehicle.
A tractor is a vehicle.
A plane is a vehicle.
A fridge is a machine.
An air conditioner is a machine.
A computer is a machine.
A television is a machine.
A telephone is a machine.
A boiler is a machine.
A tap is a machine.

Extra practice

Ask students to repeat the product words, focusing on the stressed syllable(s) in each word or phrase.

Pronunciation: Saying numbers (1)

1. Set a time limit of one minute. Students write the numbers next to the correct word.
2. 🎧 Play the recording pausing after each number for students to repeat. Check the vowel sound in each word and the stressed syllable on *seven*.
3. Set the exercise and go over the example. Divide the class into pairs, A and B. Student A asks the questions with book open, Student B should answer with book closed. Then students swap roles. Monitor and give feedback.

Answers

8	=	eight
5	=	five
4	=	four
9	=	nine
1	=	one
7	=	seven
6	=	six
10	=	ten
3	=	three
2	=	two
0	=	zero

Transcript 🎧 004

eight, five, four, nine, one, seven, six, ten, three, two, zero

What is engineering all about?

Recognize singular and plural nouns in spoken sentences

Use slides when listening to a short talk about engineering

Understand and practise target vocabulary: areas of engineering

Introduction

Write the title of the lesson on the board. Refer students to the subheading: *Engineers are interested in many different things*. Explain that, in this lesson, they will find different answers to the question.

A

Exploit the photograph of Luisa:

Ask: *What's she doing?*

Elicit possible answers, such as:

She's teaching/giving a lesson/talking about engineering, etc.

Exploit the visitor badge and check understanding of *visitor*.

Focus students' attention on the instructions for Exercise A. Check understanding. Ask students to read the text and complete any words they can.

🎧 Play the recording for students to check their answers. Go over any words students had difficulty with.

Answers & Transcript 🎧 005

Good morning. My name's Luisa Minto. I'm an advisor. I'm with the Career Centre in Hadfield. Thank you for inviting me today. My talk is about engineering. Engineering is a very important part of our life. But what are engineers interested in? Let's find out!

B

1. Most students will be familiar with PowerPoint slides and other visual media. However, check understanding and pronunciation of the word *slide*. Give students time to study the slides. Divide the class into pairs and set a two-minute time limit to name some of the items. At the end of the time, elicit some words for the items, but don't spend too long on this.
2. Students stay in their pairs. Set the exercise and see if they can work out which words go with each slide, with minimal explanation from you. After a few minutes, elicit answers. Give further explanation if necessary, as the talk in Exercise C will provide clarification.
3. Check students understand the exercise and go over the example showing how the stressed syllable should be marked. 🎧 Play the recording. Students complete individually, then compare answers in pairs. Elicit answers.

NOTE Students need to practise the listening strategy of identifying a word from its stressed syllable. This exercise helps to practise that and also prepares students for hearing the words in context when they listen to the talk.

Practise pronunciation of the target words if you wish, but this is not essential as the lesson outcome is focused on listening rather than speaking.

Answers

- Students' own answers.
- Top row from l-r: energy sources, biology
Middle row from l-r: engines/vehicles, gauges
Bottom row from l-r: tools, machines
- Answers & Transcript 006**
biology
engines
gauges
machines
energy sources
tools
vehicles

Listening skill: Using slides for understanding

Give students time to read the information in the Listening skill box. In a monolingual class, you can translate the information. Otherwise, the meaning should become clearer during the activities; refer back to the information after students have completed the lesson activities.

C

- Check students understand the exercise. Explain that the listening is quite long because it is a talk, and that they will hear only one person speaking (i.e., it is not a conversation). Students do not need to understand every word.
 - Play the recording. Monitor while the recording is playing to make sure students are completing the exercise correctly. Students compare answers in pairs. Elicit answers, preferably using a visual medium. Replay any sections students had difficulty with.
- Set the exercise. Ask students to read the extract in the speech bubble beginning: *So, slide one. An engineer is ...* Show how the word *like* is used here to introduce examples. It is not a verb, it's a preposition. Divide the class into pairs. Students discuss any examples for each slide they can remember. Do not elicit answers.
- Play the recording again, pausing where necessary for students to write or edit answers. Elicit answers, preferably using a visual medium. Give help with spelling where necessary.
If students found the activity difficult, see the Extra practice activities on page 19.

NOTE With a strong class, you can set Exercises 1 and 2 together.

Answers

- (Clockwise from top left) 4, 6, 1, 5, 3, 2
- Slide 1: cars, trains, planes
Slide 2: mobile phone, food mixer
Slide 3: tool box (spanner, hammer, pliers)
Slide 4: water, wind, steam, petrol, electricity
Slide 5: thermometers, pressure gauges, clocks
Slide 6: robots, nanotechnology

Transcript 007

Good morning. My name's Luisa Minto. I'm an advisor with the Careers Centre in Hadfield. Thank you for inviting me here today. My talk is about engineering. Engineering is a very important part of our life. But what are engineers interested in? Let's find out!

So, slide one. An engineer is interested in machines.

There are many kinds of machines. Machines are like engines. In fact, the name 'engineer' comes from engine. There are engines in cars and trains and planes. OK, slide two. Mobile phones are also machines. A motor in a food mixer is a machine, too.

Here is slide three. Engineers are interested in tools. What are tools? Well, a spanner is a tool. A hammer is a tool. Pliers and saws are tools, too. Tools help us to do simple things. We need a spanner for nuts and bolts. We need a hammer for nails.

Next is slide number four. Engineers are interested in energy sources. There are many sources of energy in the world. Water and wind are very old energy sources. Think about watermills and windmills. Steam is an energy source, and petrol is an energy source, too. But electricity is the most important energy source. It is the energy source in lights and heating systems and cooling systems. It is the energy source in computers, too.

What else? Let's see. Number five. An engineer is interested in measurement. There are many gauges or measuring instruments in engineering. For example, thermometers are gauges for temperature, pressure gauges are for pressure and clocks are gauges for time. And finally, a modern engineer is interested in biology. Biology is the study of living things, like plants and animals and human beings. So why is an engineer interested in biology? Because there is a new type of engineering – bioengineering. Maybe this is the most important type of engineering for the future. Robots are part of bioengineering. Nanotechnology is also part of bioengineering. *Nano* means very, very small. Nanotechnology is important in medicine. Now, to sum up. Engineers are interested in many things. Engines and tools. Energy sources. Measurement. And finally, biotechnology. Now, are there any questions so far?

D

- Check students understand what a *noun* is, perhaps by eliciting examples of nouns on the Course Book page. Write a list of singular and plural nouns on the board: *a machine, a vehicle, cars, planes*, etc. Add examples of more abstract nouns which may be less obvious to the class for example: *a talk, a name*,

products, biology. Remind students that regular plurals will have ~s on the end of the word.

Students find examples of singular and plural nouns in the extract individually then allow students to compare in pairs. Monitor and make a note of problem words for feedback. Check students have recognized the irregular plural *people*.

2. Students discuss the two questions in pairs. Elicit answers. Use this exercise to revise the rules for *a* versus *an*. Plural nouns in definitions do not usually have articles.

NOTE In this lesson, uncountable nouns such as *water, petrol, etc.*, have not been focused on. These types of nouns will be dealt with in later units.

Answers

1. An engineer (S) is interested in tools (P). What are tools (P)? Well, a spanner is a tool. A hammer (S) is a tool (S). Pliers (P) and saws (P) are tools (P), too. Tools help us to do simple things (P). We need a spanner (S) for nuts (P) and bolts (P). We need a hammer (S) for nails (P).
2. Singular nouns have *a* + consonant; *an* + vowel. Plural nouns in definitions do not usually have an article.

NOTE Definitions in English can be singular or plural with no effective change in meaning, for example, *A hammer is a tool./Hammers are tools.*

Grammar for listening: Recognizing singular and plural

Go through the information in the box. Refer back to your list of nouns on the board and Exercise D1 if necessary.

Pronounce the example plural nouns to show the three different endings. Ask students to repeat the words if you wish. More practice is given in the exercises in the next lesson.

🎧 Play the recording. Students write the number of each sentence then *S* (singular) or *P* (plural). Play the recording again, pausing after each sentence to elicit answers.

Answers & Transcript 🎧 008

1. A food mixer is a machine. (S)
2. Thermometers and clocks are gauges. (P)
3. He is an engineer. (S)
4. Next is slide number four. (S)
5. Engineers are very important. (P)
6. Cars and lorries are vehicles. (P)
7. She's an advisor. (S)
8. Where are the tools? (P)
9. All the engineers are away today. (P)
10. There isn't a motor in a watermill. (S)

Extra practice

1. Use the transcript to focus on signpost language, e.g., giving examples: *like, for example, another example.* This is covered more fully in a later unit.
2. Divide the class into pairs. Students practise asking and answering the questions below. Write prompts on the board for each question and answer.

A: What's a car? B: It's a vehicle.

A: What's a clock? B: It's a gauge.

A: What's a spanner? B: It's a tool.

A: What's a fridge? B: It's a machine.

A: What's an engine? B: It's a machine.

Singular or plural?

Spell and pronounce plurals of target vocabulary for the unit

Use singular and plural forms of *be* in sentences and questions about machines and devices

A

When students have studied the three words, elicit the singular for each word: *engine, factory, fridge*. Students should now be able to tell you the spelling rules. If they are not sure, ask them to look at the Grammar reference on CB page 181.

Set the exercise. Students complete individually, then compare answers in pairs. Write the correct plurals on the board and ask students to correct their own work.

Answers

- tools
- tractors
- computers
- lights
- vehicles
- nuts
- clocks
- gauges
- lorries
- laboratories

B

- If necessary, remind students about the three different pronunciations of plural *-s* – you can refer back to the Grammar for listening box on page 8. Divide the class into pairs. Students have a go at pronouncing each plural.
- Play the recording to check their pronunciation and practise.

NOTE The items in Exercise A are in groups: 1 to 3 = /z/, 4 to 7 = /s/, 8 to 10 = /ɪz/ (although 9 and 10 = shortening of final vowel really, but often classed as /ɪz/).

Answers & Transcript 009

- tools /z/
- tractors /z/
- computers /z/
- lights /s/
- vehicles /s/
- nuts /s/
- clocks /s/
- gauges /ɪz/
- lorries /ɪz/
- laboratories /ɪz/

C

This exercise consolidates the new vocabulary from the lesson so far, as well as revising singular and plural forms of nouns and of the verb *be*. Use the board to remind students of the forms of the verb *be*:

A factory is a workplace.

It

Lorries are vehicles.

They

Set the exercise, pointing out that some of the nouns in the two boxes are singular and some are plural. Students must choose the correct form: *is* or *are*. Elicit one or two sentences as examples, then drill them. Students work in pairs or groups of three to make more sentences. Elicit some of the sentences and practise pronunciation as necessary.

Finally, for consolidation, ask students to write their sentences on the board.

Answers

A factory is a workplace.
 Engineers are people.
 Luisa is an advisor./Luisa is a name.
 Engines are machines.
 A hammer is a tool.
 Water is an energy source.
 Lorries are vehicles.

D

Go over the examples. Use the board to highlight the grammar and pronunciation of the question forms and the answers:

A factory is a workplace.

Is a factory a workplace?
Yes, it is.

Thermometers are tools.

Are thermometers tools?
No, they aren't.

Drill the example questions and answers. Check students use the correct intonation for questions and stress the verb in the short answers.

Set the exercise and ask students to read through questions 1–5. Students practise in pairs.

Monitor and give feedback. Point out that all questions should begin with *Is* or *Are*. Ask one or two pairs of students to say their questions and answers for the whole class.

Possible answers

- Yes, it is.
- Yes, they are.
- No, they aren't.
- Yes, it is.
- They're tools.

E

Set the exercise. Monitor and make a note of general problems for feedback. Ask some pairs to demonstrate good questions and answers for the whole class.

Hello, everyone!

Use sentences with *be* to introduce a talk about self

Speaking: giving a simple introduction to a talk, including getting attention

Say short forms of *be* in sentences about yourself

Introduction

As always, draw attention to the lesson and the subheading.

A

Check students know the words for the times of the day: *morning, afternoon, evening, night*. Students discuss the question in pairs. Elicit answers and explain that it's not always possible to give exact times. Explain that sometimes we omit the word *good* for *good morning/afternoon/evening/night*, e.g., *Morning, Jack!*

🎧 Play the recording. Students listen and repeat. Focus on:

- Consonant clusters and the missing or reduced /d/ sound in *good morning* and *good night*.
- Linking consonant + vowel sounds in *good afternoon* and *good evening*.

Answers

Good morning – until 12.00 p.m. (midday/noon).

Good afternoon – from 12.00 p.m. until about 5 or 6 p.m.

In the winter, we would probably switch to good evening earlier when it starts to get dark.

Good evening – from 5 or 6 p.m. until you go to bed!

We use all of the above in more formal situations, for example, in business meetings.

Hi! – anytime; more informal than the expressions above.

Hello – any time.

NOTE The phrase (*good*) *night* is usually only spoken when you are leaving a group of people at the end of the evening, or going to bed. It really means *goodbye*.

NOTE If students' language ability allows, you could have a brief discussion about the cultural differences of the greetings between the UK/USA and other parts of the world. In the UK, we rarely say *Good day*, as it's very old-fashioned, and *Good morning/afternoon/evening* are used less frequently than their European equivalents. The more informal *Hi* or *Hiya* is replacing them in most situations.

Transcript 🎧 010

Hi!

Hello.

Good morning.

Good afternoon.

Good evening.

Speaking skill: Introducing a talk

Exploit the visual. Ask: *What's she doing?* (Starting a presentation.) Go through the information and check understanding of the word *introduction*. If students do not understand the word *topic*, reassure them it will become clearer during the lesson.

B

1. Ask students to read through the sentences and complete any words they can. 🎧 Play the recording so that students can check their ideas. Elicit answers. Discuss why Gabi says *hello* three times (to get attention, because the students are talking, not listening, etc.). What else could she say? (e.g., *Listen! Be quiet! I'm ready!* – although these are not really polite).
2. 🎧 Play the introduction again, pausing after each sentence to elicit answers. Ask students to repeat the sentences with the correct stress.

Answers & Transcript 🎧 011

Um ... hello, everyone. OK. Hello, everyone! Hello! My name's Gabi Donadel. And I'm a student. I'm studying Engineering. OK. My talk is about electricity. It's an energy source. In fact, it's the most important ...

Pronunciation: Short forms

Focus students on the Pronunciation box at a suitable point after Exercise B.

Show how the apostrophe is used to replace the letter *i* in *is* and the letter *a* in *are*.

🎧 Play the recording and ask students to listen and repeat.

Transcript 🎧 012

1. I'm a new student.
2. You're in room D3.
3. It's a very big factory.
4. She's a very good engineer.
5. He's a mechanic.
6. We're from London.
7. They're in the laboratory.
8. What's a gauge?
9. Who's Bill Gates?
10. Where's the thermometer?

Extra practice

Ask students to recall the sentence for each short form.

OR

Elicit new sentences for each short form.

C

1. Ask students to select a topic, but do not tell anyone else. Students will not have to give any information about the topic; they only introduce it.
2. Set the exercise. Remind students about the use of short forms of the verb *be* if necessary:
name is = name's
I am = I'm
It is = It's
 Elicit ideas for the first sentence: *Hello/Hi/Good morning/afternoon/evening everyone!*
3. Divide the class into pairs. Students should take turns saying each sentence to each other to improve pronunciation and grammar. Monitor to check students pronounce the short forms correctly, and stress the correct words (see the transcript for track 011).

NOTE In this exercise, students rehearse their talks. They need to get into the habit of practising (individually or with a partner) what they are going to say. Students need to monitor their own performance independently and try to improve it. They should say each sentence for accuracy first – good pronunciation of individual phonemes and good stress and intonation – and then for fluency, i.e., gradually speeding up to a normal native speaker speed. Ideally, they should say each sentence at least ten times before they have to say it in front of the class.

Model answer

Good morning, everyone! My name's Rob. I'm a student. My talk is about Rolls-Royce. It's a power systems company.

D

Divide the class into groups of three. Demonstrate the activity using one or two stronger members of the class.

Tell the class they must be good listeners as well as speakers. Refer students to the form in the Resources on CB page 153 and make sure they understand how to complete it.

Monitor and make a note of common errors for later feedback.

See the Teacher's Book Introduction for more help on dealing with presentations and using feedback forms.

English in action: Numbers and units of measurement

Say numbers 11–99 with better pronunciation

Say measurements

Produce vocabulary and language from the lesson to complete an information-gap activity

Introduction

Refer students to the title, but do not explain at this point. The meaning of *units of measurement* will become clear as the lesson unfolds. Exploit the visuals. Check students understand that these are all measuring instruments. You can measure something with each one. But what can you measure with each gauge?

A

Divide the class into pairs. Monitor to check pronunciation, particularly the stress of each item and each gauge. Give feedback.

Answers

- | | |
|------------------------|-------------------------------|
| 1. <u>current</u> | the <u>multimeter</u> |
| 2. length and width | the <u>micrometer</u> |
| 3. <u>pressure</u> | the <u>pressure gauge</u> |
| 4. <u>temperature*</u> | the <u>thermometer</u> |
| 5. weight | the electronic <u>balance</u> |
| 6. <u>voltage</u> | the <u>multimeter</u> |

*Make sure students do not pronounce the second e in *temperature*.

B

Students continue in pairs. Check pronunciation and stress. Monitor and give feedback.

Answers

- | | |
|---------------------|------------------------|
| 1. current | amps |
| 2. length and width | <u>millimetres</u> |
| 3. pressure | bars |
| 4. temperature | <u>degrees Celsius</u> |
| 5. weight | <u>kilograms</u> |
| 6. voltage | volts |

Pronunciation: Saying numbers (2)

Set a time limit of one minute. Students write the numbers next to the correct word.

🎧 Play the recording, pausing after each number for students to repeat. Check the vowel sound in each word and the stressed syllable on *~teen* words, e.g., *sixteen*, and on the first syllable with the tens, e.g., *sixty*. Ask individual students to repeat pairs of numbers, e.g., 13/30, with the correct stress.

Transcript 🎧 013

11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 30, 40, 50, 60, 70, 80, 90

Pronunciation: Saying units of measurement

Give students time to read the information in the box.

④ Play the recording. Students repeat as a whole class and then individually.

Transcript ④ 014

millimetres
kilos or kilograms
degrees Celsius
volts
amps
bars

Write some more units on the board, e.g., *33 mm*.
Students say the number plus units.

C

1. Check students understand the exercise. Ask students to read the conversation and think of possible answers. Elicit ideas.
④ Play the recording, pausing after each line for students to write the answers. Once you have played the complete conversation, go back and replay any lines students had difficulty with. Use the board to highlight the language used for talking about units of measurement.
2. ④ Play the recording again, pausing after each line for repetition and drilling. Then students practise in pairs.

Answers & Transcript ④ 015

Alan: Check the boiler.
Bob: OK.
Alan: What's the pressure?
Bob: It's two bars.
Alan: What about the temperature?
Bob: It's 66°C.
Alan: That's fine.

D

1. Go through the items and check the pronunciation again. Divide the class into pairs. Students try to guess the measurements (numbers and units). Monitor and give help with pronunciation of numbers and units where necessary.
2. Still in pairs, label students A and B. Refer students to the relevant Resources page in the Course Book (Student A page 153; Student B page 167). Remind students of the correct questions to use – they can look back at Exercise B if necessary. Monitor and give help where necessary. Make a note of common errors for later feedback.

NOTE This is the first time in this book that students are asked to do an information-gap activity. It is worth spending extra time setting up the exercise and monitoring to check students are doing it correctly, so that they are also well-prepared for future information-gap activities. See the Teacher's Book Introduction for more ideas on dealing with this type of activity.

A case study

Identify text types before reading

Identify the subject of SVC/SVO sentences

Read a text in order to answer research questions and understand new words

Be familiar with some of the features of an information text in an encyclopedia, in print or online

React to information in a text

Subject note

Case studies are a basic part of Engineering courses. In most case studies, background information is given and either students have to identify the problem, or the problem is highlighted and students have to suggest solutions.

Introduction

Write the lesson heading on the board: *A case study*. Elicit or explain the meaning in its broadest sense (it is information about a product – usually a product with a problem. Students will gain a deeper understanding as they work through the lesson.)

A

Once you have established the meaning of *make* in this context, have a general class discussion.

Answers

Students' own answers.

B

Check students understand the four questions and reassure them it doesn't matter if they are not sure of the answers. Students ask and answer questions in pairs. Elicit ideas, but don't confirm or correct as answers will be checked in Exercise C.

Reading skill: Recognizing text types

Go through the information in the box. Check understanding. Elicit two or three more text types, for example, a course book, a notice, an advert, a webpage, etc.

Students identify the text types individually then compare answers in pairs. Elicit answers and give help with pronunciation. Tell students they should learn the words for the text types.

Answers

1. a case study
2. a table
3. a pie chart
4. a line graph

C

Remind students of the answers they gave in Exercise B. Do they want to change any answers? Why/Why not?

NOTE Students do not need to understand the source information in the graph, pie chart and table. Dealing with sources will be dealt with later in the course.

Answers

1. See Text 4: 1.4 billion
2. See Text 2: Toyota
3. See Text 3: White and silver are equally popular.
4. See Text 1: 150 years old

D

Set the exercise. Students complete individually, then compare answers in pairs. Elicit answers. Go over any answers or vocabulary causing difficulty.

Answers

1. oil – a natural liquid, under the ground or the sea
2. efficient – works well
3. green – good for the environment
4. exhaust – the gases from the back of a car
5. low – a small amount; opposite of 'high'; small (in quantity)

E

Set for individual work and pairwork checking. Feed back orally.

Answers

1. T
2. F – There is one car for every seven people in the world.
3. F – Black is the third favourite colour for cars.
4. T
5. T
6. T
7. T
8. F – According to the text, we can use petrol engines for the next 40 years.

F

Set for group work. Students can discuss in their own language in monolingual groups, if that is acceptable in your teaching environment. Otherwise, set quite large groups, so there is a chance that people will be able to help each other with vocabulary and grammar.

Answers

Students' own answers.

Grammar for reading: Identifying the subject

You can do this exercise at any time after Exercise C.

In English, subjects can be very long. This is a simple introduction to dealing with this feature.

Students complete each exercise individually, then compare answers. Elicit answers.

Answers

- 1.–2.
 - (underline) = subject; words in brackets = number of words in the subject
 - Firstly, the car engine is not efficient. (3 words)
 - Only 20% of the energy is useful. (5 words)
 - Secondly, car engines are not green. (2 words)
 - The exhaust gases are CO₂, N₂ and CO. (3 words)
 - They are bad for the environment. (1 word)
 - Finally, oil supplies are low. (2 words)
 - They world has oil for only about 40 years. (2 words)
3. Nouns and pronouns, but the nouns can have articles and adjectives in front of them, and preposition + noun after.

Driving into the future

Understand and practise target vocabulary: petroleum cars and electric cars

Writing subjects of mainly SVC sentences

Introduction

Focus on the lesson heading and lesson subheading. Remind students about the case study in the last lesson. Elicit some of the problems with the petrol engine for cars.

A

- 1.–2. Set the exercise. Students complete individually, then discuss their answers in pairs. Elicit answers. Give further help with the meaning of new vocabulary and pronunciation where necessary.
 - Play the recording for students to check their answers.
3. • Play the recording again. Students underline the stress individually, then compare answers at the end. Elicit answers, and as you do so, practise the correct pronunciation of each word.

Answers & Transcript 016

- 1.–3.
 - a. engine
 - b. pipe
 - c. exhaust pipe
 - d. whels
 - e. petrol tank
 - f. electric motor
 - g. socket
 - h. wire
 - i. battery
 - j. plug

NOTE You might take the opportunity to point out that most nouns with two syllables are stressed on the first syllable.

B

1. Refer students to the table and do some quick checking of the information to make sure that students understand how the information is laid out and the relationship between the table and the diagrams. (The table shows information about the two engine types in the diagrams.) Set the exercise. Students write answers individually, then compare answers in pairs.
2. • Play the recording for students to check their answers. Go over any answers causing difficulty.

3. Practise the pronunciation of two or three questions and elicit answers. Check students use *the* with each phrase. Then students continue in pairs. Monitor and give feedback on pronunciation of new vocabulary.
4. Students discuss the question in pairs using information in the table and their own ideas.

NOTE Some phrases here are quite long and difficult to pronounce. As long as students can pronounce them sufficiently well to make themselves understood, it should be acceptable on this occasion. It's more important they are able to recognize the words and phrases in isolation and in context.

Answers

- 1.–3. **Answers & Transcript 017**
 - a. What is the energy source of a petroleum engine car?
It's petrol or diesel.
 - b. What is the energy source of an electric car?
It's electricity.
3. Students' own answers.

C

Set the exercise and go over the example. Use the board to help you explain the rule:

a/an + job

the + job title (+ of)

Students complete the sentences individually, then compare answers in pairs. Elicit answers.

Get students to make more sentences about the different types of engine.

Answers

1. Petrol is a source of energy. It is the source of energy for the petroleum engine.
2. An electric car has a battery. The battery is the energy source.
3. Carbon dioxide is a gas. It is in the exhaust of a petroleum engine.
4. The exhaust pipe is at the back of a petroleum engine car.

Grammar for writing: Subjects and verbs

Remind students of the work they did in the previous lesson on finding subjects in a text (CB page 15). Give students time to read the information. Check understanding.

Students find the subjects in Exercise C. Elicit answers.

Answers

1. Petrol is a source of energy. It is the source of energy for the petroleum engine.
2. An electric car has a battery. The battery is the energy source.
3. Carbon dioxide is a gas. It is in the exhaust of a petroleum engine.
4. The exhaust pipe is at the back of a petroleum engine car.

D

Set for group work or, with a small class, do as a whole-class activity.

Answers

Students' own answers.

E

Focus students' attention on the visual. Ask: *What can you see?* (A hydrogen engine.) Set the exercise in the following way. Write the first two sentences from the text on the board. Elicit the answer/subject for the second sentence – *It (is 75 years old.)*. Show how the pronoun *It* refers back to the subject of the previous sentence, *Hitoshi*. Tell students they must sometimes look back to the previous sentence to find the correct subject.

Students complete individually, then compare answers in pairs. Monitor and give help where necessary, perhaps by reminding students to look back at the previous sentence, or ahead to the word after the verb (the complement). Elicit answers.

Answers

Hitoshi is a car company. It is 75 years old. Hitoshi cars are cheap. They are for young people and families. The energy source is the petrol engine. But the company is worried. Petrol is expensive, and the petrol engine is bad for the environment. The Hitoshi engineers are interested in a new hydrogen engine. The exhaust is water.

Extra practice

Ask students to find and circle the plural nouns in the text (*cars, families, engineers*).

F

Check students understand the exercise. Point them towards the comparison table at the beginning of the lesson and remind them of Exercise B4. The exercise can be done in pairs or groups. As before, with a monolingual class, it can be done in the students' own language, if acceptable. Monitor while students are working. When students have finished, elicit answers.

Answers

Students' own answers.