

Warm up

Ask students to brainstorm a list of types of visual data (table, bar chart, line graph, pie chart, flow chart, etc.), and draw examples that the class can make notes of.

Using the Factsheet

There are three possible ways to use the Factsheet:

- 1 Give students the Factsheet before the lesson, so they can read it at home and come to the lesson prepared to do the Worksheet. If you use this approach, start the lesson by checking that all students have read and understood the Factsheet, and answer any questions.
- 2 Give students the Factsheet at the beginning of the lesson and start by working through it with the students.
- 3 Focus on the Worksheet in the lesson, then give students the Factsheet at the end of the lesson, so they can take it home and keep it as a reference or revision tool.

Theory to practice


Answers

- a 8
- b 7
- c 10
- d 5
- e 6
- f 9
- g 1
- h 3/4
- i 2

Using the Worksheet

Practice

1 01 Listen to the audio and complete the table.

- Tell students they are going to hear part of a presentation about carbon dioxide emissions.
- Have a short whole-class discussion about what words/ideas students think they might hear.
- Remind students that they need to focus on completing the table.
- Play  01 and ask students to complete the table.
- If students need to hear the audio again, play the track a second time.
- Get some students to share their answers with the whole class.

Answers

Figure 1: Average annual change in CO₂ emissions by sector


	million metric tonnes	
	2017	2018
Power	-78	34
Transport	16	18
Industry	13	55
Buildings	7	54

Source: Rhodium Climate Service

Transcript

... some nations have taken a step back recently in terms of CO₂ emissions. Take, for example, country X, which is shown in Figure 1 on your handout. The table shows the average annual change in carbon dioxide emissions by sector. The figures come from the Rhodium Climate Service, by the way. You can see the four main sectors represented and their annual changes in emissions in millions of metric tonnes, that's MMT, in 2017 and 2018. Let's look at the first sector, power, to begin. There was a dramatic fall in CO₂ emissions in 2017 – 78 million metric tonnes less than 2016. That's huge. But worryingly, there was a significant increase of 34 MMT in 2018. This is due to country X recommitting to coal-based power production, a move away from renewables and nuclear. Transport has shown a year-on-year gradual rise in MMT numbers, and 2017's 16 MMT jump and then 2018's rise of 18 MMT were no surprise, given increased air travel and use of road haulage. However, these next figures are particularly concerning. Industry increased its CO₂ output in 2017 by 13 MMT but then surged dramatically in 2018 by a further 55 MMT. This is due to a relaxation of government controls and proposed new legislation in the pipeline. Similarly, buildings emissions went up in 2017 by 7 MMT and then surged substantially in 2018 by 54 MMT. So, what does all this mean? CO₂ emissions are still increasing and some countries seem unworried by this, so we have to double our efforts in meeting emissions targets.


2 01 In pairs, complete the phrases used and discuss the questions. Listen again and check.

- Put students in pairs.
- Ask them to work through the phrases together, trying to complete them.
- Play  01 and ask students to check their answers.
- While students are working, walk around the class to monitor and assist where necessary.
- Get some pairs to share their answers with the whole class.
- Ask students to discuss the completed phrases and their functions.

Answers

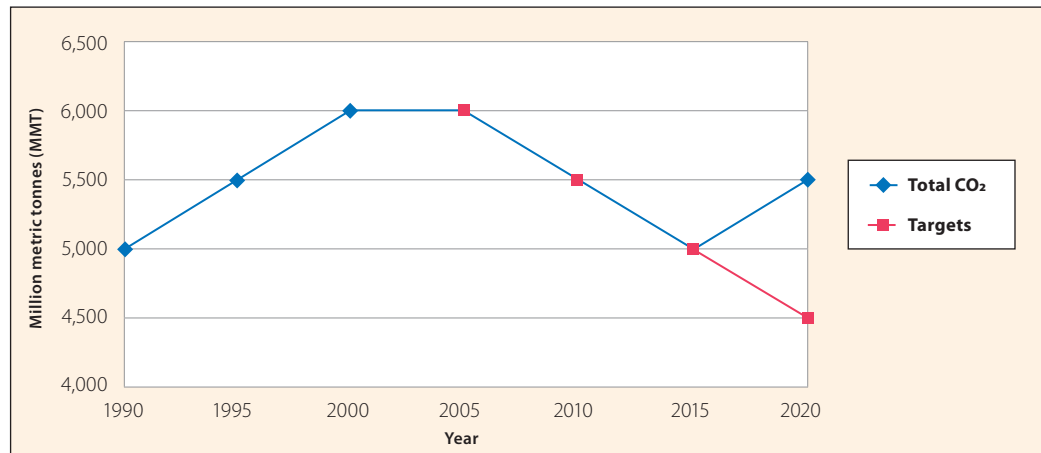
- a shows
- b come from
- c represented
- d dramatic
- e increase
- f gradual
- g dramatically
- h mean
- 1 a
- 2 b
- 3 c
- 4 d, e, f, g
- 5 h

3 02 Listen to the next part of the audio. Complete the chart and the phrases below.

- Tell students they are going to hear the second part of the presentation about carbon dioxide emissions.
- Remind students that they need to focus on completing the line chart with two lines, the title and the key.
- Play  02 and ask students to complete the chart.
- If students need to hear the audio again, play the track a second time.
- Get some students to share their answers with the whole class.

Answers

Figure 2: **Total CO₂ emissions versus agreement targets**



- a Figure
- b represents
- c rose
- d remained
- e decreases
- f important

Transcript

... OK, let's come back to country X to further demonstrate my point. Let's take a look at Figure 2, which represents the total carbon dioxide emissions versus agreement targets from 1990 to 2020. You can see that in 1990, emissions, represented by the blue line, totalled 5,000 million metric tonnes. This rose gradually by 500 MMT over the next five years and a further 500 MMT by 2000. The level remained steady for the next five years, until, in 2005, agreement figures were introduced as targets, so that countries might aim to reduce their emissions steadily. Country X did well, with small decreases of 500 MMT by 2010 and again a further 500 MMT by 2015, both exactly in line with the agreement targets, which you can see in red. There should be a similar drop in CO₂ output by 2020, according to the targets. However, this won't be the case. Their emissions are set to rise to about 5,500 MMT by 2020, according to our data projections. Why is this important? Well, it's a clear reversal in emissions trends and falling behind international targets. The consequences could be severe ...

TIP

Get students to look at the tip. Get one of the students to read the tip aloud for the whole class. Check understanding and answer any questions.

4 In pairs, add more phrases to the table.

- Put students in pairs.
- Ask them to discuss the different functions in the table and add as many phrases as possible.
- Encourage them to share their answers with another pair to discuss if they are correct.
- Get some students to share their answers with the whole class.

Suggested answers

Function	Phrases
Refer to a chart	The table shows ... / The figure represents ...
Give title/source	The figures come from ... / The source of the data is ...
Large fall (adjective + noun)	dramatic fall / significant drop
Large rise (adjective + noun)	significant increase / large jump
Small fall (adjective + noun)	small decrease / minor drop
Small rise (adjective + noun)	gradual rise / slight increase
Discuss significance	What does this mean? / How is the data significant?

5 In pairs, describe the table and chart from the presentation using the phrases.

- Put students in pairs.
- Ask them to review the phrases and use them to describe the two visuals.
- While students are working, walk around the class to monitor and assist where necessary.
- Give feedback to the class on any issues (common language errors) from the lesson.

6 Draw a chart or table of made-up figures about a subject you are familiar with. Present your visual data to your group and answer their questions.

- Get students to work on this individually.
- Ask students to prepare a simple chart, table, etc. with made-up figures about a subject they are familiar with.
- Tell them to present the visual data to their group and answer the questions.
- Walk around the class to monitor and assist where necessary.
- Get some students to present to the whole class.

Reflect

7 This is the transcript of the presentation you listened to. In pairs, look at the highlighted phrases. What functions do you think they serve? What other phrases could the speaker have used?

- Get students to work in pairs.
- Ask them to identify the functions of the different highlighted phrases in the transcript from the presentation.

Learning outcome

By the end of the lesson, students should:

- know about different types of visual data
- know how to label different parts of tables, charts, etc.
- be able to listen and understand phrases referring to visual data in presentations
- be able to listen and highlight key data and its significance in a presentation

Ending the lesson

- Have a whole-class discussion about what students learnt in the lesson. Answer any questions.
- Elicit key concepts through questions, such as:

What different types of visual data are there?

What are the different parts of the data called?

What phrases can we use to talk about changes in data (trends)?

How can we highlight the significance of data?

Integrated skills

If you prefer an integrated skills approach, print the transcripts from Exercises 1 and 3 and get students to read them and find the keywords, rather than listen to them. Change the instructions in Exercises 1 and 3 to say *Read* instead of *Listen to*. This will enable you to address both reading for keywords and listening for keywords.