4 Databases

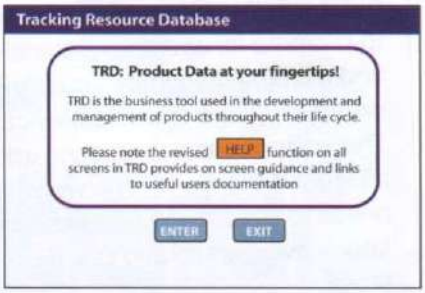
- talk about databases
- talk about data processing
- ask for and give advice
- talk about company departments

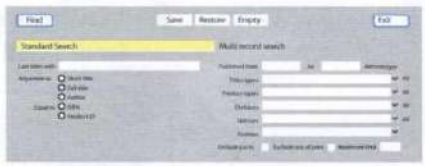
Database basics

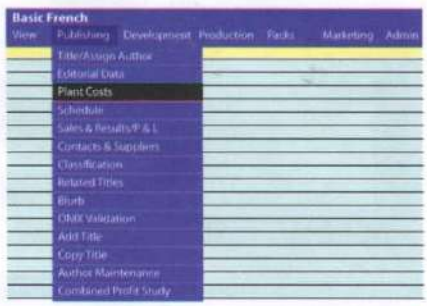
Speaking **1** What database products do you know and use at work and at home?

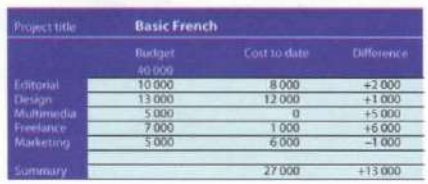
Listening **2** 23 Listen to two colleagues at a book company. Chris needs some information from the production database. Complete this dialogue.

Chris: Tim, (1)_____ you help me a moment, please?
Tim: Sure. What's the (2)_____?
Chris: I need some (3)_____ about a book budget from the database.
Tim: OK.
Chris: But I don't know how to (4)_____ it.
Tim: No problem.
Chris: So what do I do first?
Tim: Enter your name and (5)_____ and press enter.
Chris: Erm ... ?
Tim: You have got a password?
Chris: Erm, I can't (6)_____ it.
Tim: Use mine. Type in t evans, that's t – e – v – a – n – s, then snavet. s – n – a – v – e – t.
Chris: OK.
Tim: Now press Enter. Now what is the name of the book?
Chris: *Basic French.*
Tim: OK. Type in that in the title (7)_____ in the first (8)_____. Now press Find. There it is. OK, budget. Click (9)_____ Publishing and scroll down to Plant costs and click on that.
Chris: Good. There's the budget in the second row. Thanks, Tim.
Tim: No problem.









Language

Asking people to do things

We use **can/could/would you** + infinitive without *to* when we ask somebody to do something for us.	***Could you help*** *me, please?* *Sure.*
	Please ***could you help****?* *No problem.*
	Can you explain *what a database is, please?* *I'm afraid I can't.*
	Please ***can you explain*** *what a database is?* *I'm sorry, I can't.*
	Would you explain *that, please?* ***Could you come back*** *a bit later? I'm busy right now.*

3 24 Listen and repeat these questions.

1 Could you help me, please?
2 Please could you help me?
3 Would you help me with this software?
4 Please could you explain how to do that?
5 Please would you give me your password?

Speaking

4 Work in pairs. Student A: make questions from the prompts. Student B: answer *yes* or *no* and give a reason why not (if your answer is no).

Example: type/name
Could you type in your name, please?

1 open/window
2 turn up/air conditioning
3 turn down/mp3 player
4 give/you/pen
5 answer/phone
6 give/password

5 Work in pairs. Use the example of a database below to explain to your partner what a database is. Use these words: *store*, *access*, *get*, *fields*, *columns*, *rows*.

Example: A database is used to .... This is a ....

First Name	Last Name	Department	Title	Phone ext.
John	**Smith**	Development	Engineer	123
Jane	**Doe**	Finance	Auditor	454

6 Why do people and organisations use databases? Discuss with the group.

Example: They use databases to find out ....

Data processing

Vocabulary **1** Match the headings in the box to the data processing steps a–f.

data coding	data collection	data entry	data sorting
data tabulation	data validation		

a _____ Gather the raw data which you want to process. 1

b _____ Arrange and systemise the data. ☐

c _____ Clean the data and double-check for faults and inconsistencies. ☐

d _____ Enter the data into a system. ☐

e _____ Arrange the data into table format so that it can be analysed. ☐

f _____ Create categories to organise the data into relevant groups. ☐

2 Put the data processing steps in 1 into the correct order.

Listening **3** 25 Listen to an IT expert describing the data processing steps to a colleague. Check your answers to 1 and 2.

4 26 Listen and mark the syllable stress in these nouns and verbs.

1 entry
2 collection
3 tabulation
4 validation
5 sorting
6 coding
7 gather
8 create
9 arrange
10 enter
11 double-check
12 format

5 Listen again and repeat the words.

Vocabulary **6** Complete these sentences with the words in the box.

about	at	between	for	from	in	into	of	~~to~~

Example: This database is used to store our financial information.

1 What's the difference _____ a database and a spreadsheet?
2 A database is _____ storing data.
3 The school has information _____ students.
4 Can people access the system _____ the same time?
5 A database is a collection _____ records.
6 You retrieve information _____ the database.
7 You enter the data _____ the system.
8 Which software do you use _____ your work?

Language

Quick questions to check understanding

We use these when we are making sure the other person understands the statement.	*That's called collection.* ***OK****?*
	That's coding? ***Got that****?*
	That's tabulation. ***All right****?*
	We call that sorting. ***Understood****?*

Speaking **7** Work in pairs. Explain the data processing steps from 1 in your own words.

8 Look at the examples of database software below. What database software do you know? What is it used for?

Data storage and backup

Vocabulary **1** Match the data storage and backup solutions in the box to pictures A–F. What other solutions are there?

external hard drive hard disk mp3 player server the Internet
usb flash drive


A _____


B _____


C _____


D _____


E _____


F _____

Reading **2** Read this article about data storage. Complete the sentences with the words in the box.

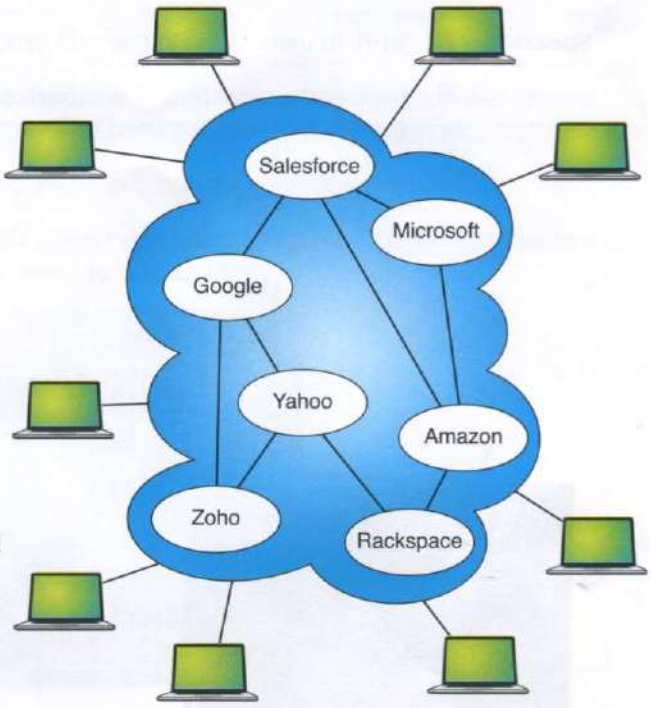
cloud contents ~~emerging~~ encrypt flash loss magnetic
offsite protect security theft volumes

Data storage

Online storage is an (1) *emerging* method of data storage and back-up. A remote server with a network connection and special software backs up files, folders, or the entire (2) _____ of a hard drive. There are many companies that provide a web-based backup.

One (3) _____ technology in this area is (4) _____ computing. This allows colleagues in an organisation to share resources, software and information over the Internet.

Continuous backup and storage on a remote hard drive eliminates the risk of data (5) _____ as a result of fire, flood or (6) _____. Remote data storage and back-up providers (7) _____ the data and set up password protection to ensure maximum (8) _____.



Small businesses and individuals choose to save data in a more traditional way. External drives, disks and (9) _____ tapes are very popular data storage solutions. USB or (10) _____ memories, DVDs and hard disks are cheap and widely accessible solutions. These methods are very practical with small (11) _____ of data storage and backup. However, they are not very reliable and do not (12) _____ the user in case of a disaster.

Speaking **3** What storage and backup solutions are the most popular? Which solutions do you use most often?

Listening **4** 27 Listen and repeat these phrases.

1 emerging technology
2 cloud computing
3 data storage
4 hard drive
5 external drives
6 backup providers

5 28 Listen to this dialogue. A colleague, Tim, is asking an IT expert, Sandy, what storage device to buy. Mark these statements true (T) or false (F).

1	Tim needs the storage device for work.	T / F
2	Tim wants to backup music and photos.	T / F
3	Sandy recommends an external hard drive.	T / F
4	Tim can spend $300 on the storage device.	T / F
5	Sandy recommends a storage device with a special feature.	T / F

Language

Asking for and giving advice

We use ***should/would*** + infinitive without *to* to give advice.	*I/You/He/She/It/We/They* ***should/shouldn't (should not)*** *... .*
	What ***should*** *I* ***do?*** *You* ***should buy*** *a flash drive.* *You* ***shouldn't get*** *a server.*
	I/You/He/She/It/We/They ***would/wouldn't (would not)*** *... .*
	What ***would*** *you* ***recommend?*** *I* ***'d (would) recommend*** *a flash drive.* *I* ***wouldn't (would not) recommend*** *a server.*

Speaking **6** Work in pairs. Practise asking for advice about backup solutions for a small company. Use the information in 2.

Example:
A: What would you recommend ... ?
B: I'd recommend .... /You should .... .

Database system benefits

Speaking **1** What kind of data do companies create, manipulate, store and retrieve?

Vocabulary **2** Match the company department 1–8 with the type of data it works with a– h.

1 Finance	a) data about employees, training, recruitment needs
2 Marketing	b) data about product specification, details and design
3 Human resources	c) data about profits, tax, loans, shares and cash
4 Customer relations	d) data about volume of products sold
5 Production	e) data about customers, satisfaction surveys, promotions
6 Technical support	f) data about product advertisements and competitors
7 Sales	g) data about quantity of product in storage
8 Stock management	h) information about the Help Desk, support calls, manuals, problem reports

3 Look at the four types of data below from PartyPlanner Ltd. What do you think PartyPlanner Ltd does? What company departments can you identify?

Speaking **4** Work in small groups. Talk about the advantages and disadvantages of a computerised database. Present your ideas to the rest of the group.

Example: There are many advantages/disadvantages ... .

Business matters

Reading **1** Read part of this email from the owner of Jumbo Book Store. Answer these questions.

1 What types of information does Jumbo Book Store communicate between its employees?
2 How do the employees exchange information in the company?
3 What documents does Amiki prepare?
4 How much time does it take to compile the data?
5 Why do the customers complain?

Let me give you some background to our company's setup.

Jumbo Book Store is a company based in Thailand. It has three book stores and a warehouse next to one of the book shops. The store manager, Amiki Sukhon, finds it very difficult to track sales because he uses handwritten sales reports that employees prepare every day. The driver takes the reports and delivers them to the main office. Every day it takes 5 to 6 hours to compile data about the sales. Based on these sales reports, Amiki writes purchase orders for new books, sales figures for the owner and customer information for the marketing department.

In addition, he often gets calls from customers complaining about poor information about available books and stationary products in the warehouse.

Could you spend some time looking at how we can improve our processes?

Regards

Speaking **2** Work in small groups. Prepare recommendations using the problem/solution outline.

Problem/Solution Outline

Problem	Who? What? Why?
Solutions	1. 3. 2. 4.
End Results	

3 Present your recommendations to another group.