

Unit 2 It's good for you!

Reading Section 2

① Read through the article briefly. What does it mainly contain?

Circle A, B or C.

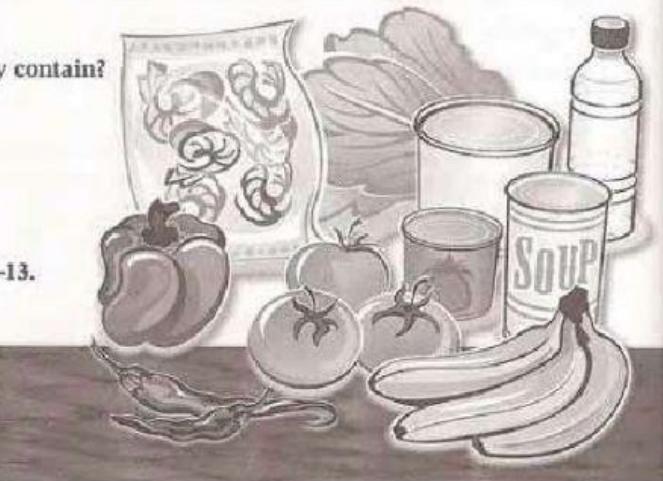
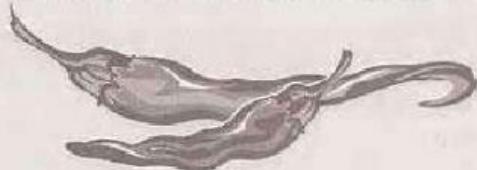
- A advice on healthy eating
- B facts about food and drink
- C criticism of the food industry

② Now read the text carefully and answer Questions 1–13.

WHAT DO YOU KNOW ABOUT THE FOOD YOU EAT?

A Most of us tend not to think about what we eat. Sure, we might have our favourite recipes, or worry about whether our food has been sprayed with pesticides, but the processes and discoveries that have gone into its production remain a closed book. Some, however, think differently. Why, they wonder, is frozen milk yellow? Why does your mouth burn for longer when you eat chillies than when you eat mustard? And what would happen if you threw yourself into a swimming pool full of jelly?

B It was for such people that *New Scientist* developed its 'Last Word' column, in which readers pose – and answer – questions on all manner of abstruse scientific issues, as they relate to everyday life. Many of the issues raised have simple answers. For the questions above, they would be: the riboflavin in milk begins to crystallise; it depends on your taste – the relevant chemical in mustard is more easily washed away by your saliva; and, you'd float, but don't dive in headfirst!



C Other questions allow us to explore issues that are relevant to everyone. For example, what's the difference between sell-by dates and use-by dates? You might expect the answer to involve overcautious health and safety regulation. But it's more complex than that. The shelf life of food is actually determined by its manufacturers, although lab tests and government guidelines also come into play. Food is tested periodically, at various temperatures, to check the level of bacterial spoilage over a few hours or days – the warmer it is, the more likely your prawn sandwich is to make you ill. After the lab tests, producers set a use-by date or a best-before date. Fresh shellfish need to be consumed by their use-by date (the date by which you must eat them). But tinned beans will probably last long beyond their best-before date (the date by which it's best to eat them), although they might not taste as good as they once did.

D The same research explains why even bottled mineral water, which had previously lain underground for decades, needs a best-before date. The problem isn't the water, but the bottling process: either bacteria can be introduced that multiply and, over time, contaminate the water, or unpleasant chemicals, such as antimony, leach into the water from the plastic bottles.

E Sometimes, this kind of scientific study takes us to some strange places. For example, we now know that the amount of oxygen in the air inside green peppers is higher than in red (by a whopping 1.23 percent), probably due to the different rate at which green peppers photosynthesise. The relevance of this research is that green peppers will decay faster than red if kept in sunlight: higher oxygen levels provide more resources to feed any bacteria that are present. Generally, cooler environments preserve food best – apart from tropical fruit. Banana skins, for example, have evolved to survive in warm conditions, because that is where they grow best. Anything below 13.3°C damages the membranes, releasing enzymes which lead to skin blackening. To avoid a mushy banana, keep it away from the chiller.

F It is not just fears for our health that keep food scientists busy. They are also involved in other areas. Their precision has, for example, also been applied to bottles – in particular, to the discovery that the optimum number of sharp pointy bits on a bottle cap is 21. Go on, count them. Years of trial and error led to the internationally accepted German standard DIN 6099, which ensures that almost every bottle cap is the same. This is because 21 is the ideal number when you take into account the circumference of the cap, the likelihood of its metal splitting, and the chances of it sticking in the capping machine. So, next time you open a bottle with a cap on it, pay homage to those who bothered to find out, starting with William Painter, in 1892.

G Of course, some researchers do care about the more serious stuff, driven by fear of the future and an ever-increasing population on a warming, land-impoverished planet. Sadly, *New Scientist's* correspondents concluded that there was no one foodstuff that could feed the world on its own. However, they did come up with a menu that could feed a family of four for 365 days a year, using only eight square metres of land. Rotating crops (so that the soil didn't lose one nutrient more than any other) would be vital, as would ploughing back dead plant matter and maintaining a vegetarian diet. After that, you would need to grow crops that take up very little space and grow vertically rather than horizontally, if possible.

Questions 1–7

The reading passage has seven paragraphs, A–G. Choose the correct heading for paragraphs A–G from the list of headings below.

- i Why a particular piece of information is given
- ii An unsolved problem and a solution to a problem
- iii Reasons that remain a mystery
- iv A source of information for some people
- v Development work leading to a conclusion
- vi Contrasting levels of interest in food
- vii The need to change a system
- viii Information connected with keeping certain kinds of food
- ix How certain advice is decided on
- x Ideas not put into practice

- 1 Paragraph Av...
- 2 Paragraph B
- 3 Paragraph C
- 4 Paragraph D
- 5 Paragraph E
- 6 Paragraph F
- 7 Paragraph G

Questions 8–13

Choose TWO letters, A–E.

Questions 8–9

Which TWO of the following are explained by the writer in the text?

- A why the 'Last Word' column was created
- B why use-by dates are more important than sell-by dates
- C how to prevent bacteria getting into bottled water
- D a way in which peppers are similar to bananas
- E why most bottle caps have a common feature

Questions 10–11

Which **TWO** problems connected with food does the writer mention?

- A confusing information about the use of pesticides
- B feeling pain when eating something
- C sell-by dates sometimes being inaccurate
- D feeling ill because of eating food after its best-before date
- E the effect of sunlight on green peppers

Questions 12–13

Which **TWO** of the following would a family of four need to do to feed itself every day of the year, according to New Scientist?

- A use more than one piece of land
- B grow the same crop all the time
- C put dead plants into the soil
- D plant only crops that grow very quickly
- E concentrate on crops that grow vertically

3 The speaker mentions a connection between health and fitness and

- A keeping employees.
- B employees' performance.
- C a company's reputation.

4 What does the speaker say about the people attending the conference?

- A Some of them may feel that there is not much they can learn.
- B All of them have attended the conference before.
- C Most of them are familiar with the speakers.

5 The speaker says that in the sessions, participants will

- A work together in pairs.
- B pretend to have various roles.
- C describe real events.

Listening Section 2

1 Look at both tasks. When is the speaker talking?

Circle A, B or C.

- A at the beginning of a conference
- B during the planning of a conference
- C at the end of a conference

2 Now listen and answer Questions 1–10.

Questions 1–5

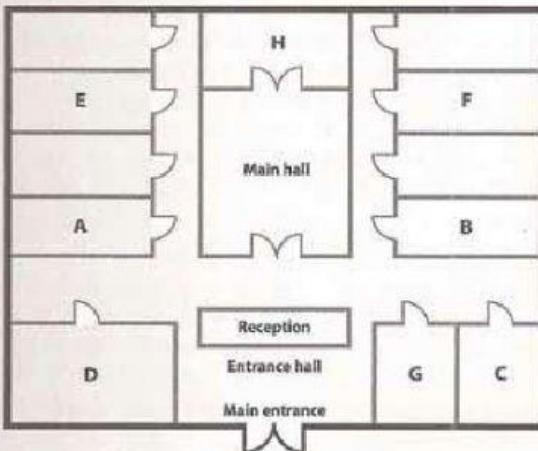
Choose the correct letter, A, B or C.

- 1 The speaker says that the conference includes issues which
 - A were requested by participants.
 - B are seldom discussed.
 - C cause disagreement.
- 2 The speaker says that in the past, this subject
 - A caused problems in the workplace.
 - B was not something companies focused on.
 - C did not need to be addressed.

Questions 6–10

Label the map below.

Write the correct letter, A–H, next to questions 6–10.



6 Setting Up a Fitness Centre

7 Healthy Eating Schemes

8 Transport Initiatives

9 Running Sports Teams

10 Conference Coordinator's Office