#### 3.12 Lesson 8A, Exercise 3

avalanche – picture 2 disease drought – picture 5 earthquake famine flood forest fire – picture 4 hurricane landslide – picture 6 tornado – picture 1 tsunami volcanic eruption – picture 3

#### 3.13 Lesson 8A, Exercise 5

- 1 We were skiing near to Chamonix in the Alps, when the snow on the slope above us started to slide down towards us.
- 2 It starts with a bad headache and sickness. People usually recover if they see a doctor quickly.
- 3 The water was two metres deep in parts of the town. And the situation won't get any better until the rain stops.
- 4 We saw a huge wave moving towards the shore at a terrifying speed. Luckily we managed to escape to higher ground.
- 5 I woke up suddenly in the middle of the night when my bed started to shake. It lasted about thirty seconds.
- 6 The eruption started at 3 p.m. The mountainside exploded and millions of tonnes of lava flowed down into the sea.
- 7 It hasn't rained for over six months in this part of Africa. The crops are dying in the fields.
- 8 The flames swept through the dry forest, destroying thousands of hectares of trees.
- 9 Heavy rains caused tonnes of rock and mud to slide down the mountainside, destroying a road and a railway line.
- 10 If food doesn't reach the poorest region in the north of the country, then thousands of people will die of hunger.

#### 3.14 Lesson 8A, Exercise 6

The hurricane struck the town of Tipton Bay on the south coast at 4 p.m. on Saturday afternoon and lasted for twelve hours. Winds reached speeds of 200 km/h. Luckily, people left their homes before the hurricane arrived, and nobody lost their life. However, flying metal and glass injured about twenty people. Emergency services rescued over 50 people from boats near the coast, and charities quickly sent food and tents to help people without homes. The hurricane seriously damaged hundreds of buildings and destroyed crops in the fields around the town.

2<sup>nd</sup> edition

**Solutions** 

#### 3.15 Vocabulary Builder 8, Part 2, Exercise 4

- 1 inform  $\rightarrow$  information
- 2 react  $\rightarrow$  reaction
- 3 educate  $\rightarrow$  education
- 4 protect  $\rightarrow$  protection
- 5 dark  $\rightarrow$  darkness
- 6 good  $\rightarrow$  goodness

#### 3.16 Lesson 8C, Exercise 2

#### Proud of their dustbin!

The dustbin is full to the top with crisp packets and coloured plastic. In fact, it's so full that it's difficult to put the lid on. But the Strauss family, who own this dirty old dustbin full of rubbish, are very proud of it. Why? Because it contains the family's rubbish for a whole year!

Two years ago, Richard and Rachelle Strauss and their daughter Verona read an article about plastic bags and how they cause pollution and harm sea creatures. They decided to stop using plastic bags completely. Now, when they buy food, they reuse their own bags each time. They recycle as much as they can – glass bottles, plastic bottles, paper, cardboard, cans – and they simply don't buy things if they can't recycle the packaging. (They buy their toothpaste in aluminium tubes just because aluminium can be recycled.) And they never throw food away – they eat their left-overs or use them to make compost.

At the moment, it's impossible to recycle plastic crisp packets and sweet wrappers – and Verona loves crisps. If she bought a packet of crisps a day, she'd have to throw away lots of plastic. So she buys the biggest packets she can find – and each packet lasts for a week!

The family are keeping a record of their lifestyle on their website. They hope that other people will read it and reduce their waste. If everyone recycled a bit more, it would make a huge difference.

#### 3.17 Lesson 8C, Exercises 5 and 6

Ava I think it's important to recycle as much as you can because it saves energy – and it saves natural resources too. For example, if we all recycled paper and cardboard, then they wouldn't need to cut down as many trees. So I always put paper in the recycling bin, not in the dustbin. I try to recycle glass too, but that's more difficult – there aren't so many recycling bins for glass. In my view, you don't have to recycle everything – a little is better than nothing.

2<sup>nd</sup> edition

**Solutions** 

- James I'm pretty good about recycling, really paper, glass, plastic. I make sure I don't throw any of those materials in the dustbin. But some people don't really care about it – the rest of my family, for example! The worst is my dad. He never puts stuff in the recycling bin, even if there's one right next to him. I keep telling him to do it and he says, "Yeah, right, I will" – but then next time, he doesn't. He says he can't get used to it. If you ask me, he's just lazy.
- Archie We've got a system at home. We put paper in one box, glass in another box and plastic in another. Since we started doing that, we don't even fill up the dustbin during the week. It's made a real difference – we're producing much less rubbish, and that's good for the environment. The thing is: we live on a crowded planet – more than six billion people! We have to think about the rubbish we produce or there just won't be anywhere to put it all.

#### 3.18 Lesson 8E, Exercise 3

#### **Collision Course**

It is 2036. An enormous asteroid is going to collide with Earth. If it isn't stopped, it will crash into the Pacific Ocean, creating a devastating tsunami. What happens next? And no, that isn't a question about the plot of a science fiction film. It's a question about a very real danger. There are millions of asteroids in our solar system, and if a large one collided with the Earth, it would be a disaster.

If a large asteroid crashed into the Earth tomorrow, what would happen? If it landed in a large city, millions of people would die instantly. The impact would cause massive destruction – imagine colliding with a rock as big as a mountain that is travelling at 20 km/s! If the asteroid landed in the ocean, there would be a giant tsunami. Thousands of cities around the world would flood. If the asteroid landed in a very remote area of land, there would be fewer deaths at first. However, the explosion would send a huge cloud of dust into the Earth's atmosphere. This dark cloud would block the light and heat from the sun. Crops wouldn't grow and it would be impossible to feed people.

The short answer is: it has happened already. About 65 million years ago, most life on Earth disappeared – including all of the dinosaurs. We now believe that this was because of a huge asteroid which changed the Earth's weather. The asteroid was at least 10 km in diameter and landed in Mexico, leaving a hole more than 180 km across.

On the morning of 30th June, 1908, a much smaller asteroid (about 90 metres across) exploded in the sky above central Siberia. Nobody lived nearby, so there were no deaths – although the explosion was so powerful that it destroyed an enormous area of forest and knocked a man off his chair 112 km away!

Scientists believe that there are two main options: we could blow up the asteroid with nuclear weapons or we could make it change direction. Both options have their disadvantages. If we blew up the asteroid, it could break into smaller pieces. Each piece could then be a danger! There are several ideas about how to make an asteroid change direction, but nobody knows which would work best – and it's impossible to test the technology. And if we failed, we probably wouldn't get another chance.

## 2<sup>nd</sup> edition Solutions

# 2<sup>nd</sup> edition Solutions

#### 3.19 Lesson 8F, Exercises 3 and 4

Hmm ... let me see. I'd choose the first method of raising money - the sponsored run. The main reason for this is that I think a sponsored run would raise more money because every runner would ask all their friends and family members to sponsor them. I mean, you can see in the photo that lots of people are taking part in the sponsored run at the same time, and there are lots of people watching, too. That's good, because it means lots of people know about the event. There's also the fact that there's a connection between the event and the reason for the event - what I mean is, you're raising money for sports equipment by doing a sports event: athletics. I'm rejecting the second option because it would only involve a few people and probably wouldn't raise very much money. As you can see in the photo, the bear is waving at the passers-by, but nobody is looking!

### 3.20 Skills Round-up 1–8, Exercises 4 and 5

- Jack Hi Anna. Come in. Dani and I were just talking about Red Nose Day.
- Anna Oh, right. What's that?
- Dani It's a charity event it's quite big here in the UK. Lots of people arrange special fundraising events.
- Jack So we're thinking of doing something here at Golden Hills. But we can't decide what to do!
- Anna Have you got any ideas?
- Dani Yes. I think we should organise a sponsored run. People can wear costumes, raise some money – and get some exercise at the same time!
- Jack What do you think, Anna?
- Anna Well, I'm not sure. Some people don't really enjoy running ...
- Dani Have you got any better ideas?
- Anna Er ... I don't know. I haven't had time to think about it yet.
- Jack I reckon we should have a quiz night. I can set the questions and the guests can all be in teams.
- Dani Boring.
- Jack I don't think it's boring. People love quizzes.
- Dani No, they don't. I don't. I hate them.
- Anna Some people like them. But maybe there's a better option.
- Dani Like what?
- Anna Hmm. I know. Why don't we organise a talent show?
- Jack You mean, like X-Factor with singing?
- Anna It doesn't have to be singing. People could choose to do different things like comedy, or dancing, or anything really.
- Jack I think that's a great idea! What do you think, Dani?
- Dani I'm not sure. How many people would really want to take part?
- Anna I don't know.
- Jack That doesn't matter. If we get ten different acts, that's enough. Everybody else can watch. Talent shows are really popular these days.

## 2<sup>nd</sup> edition Solutions

- **Dani** But how will it actually raise money?
- Jack We'll sell tickets for the show.
- Dani l'm just not sure. I still think a sponsored run is a better idea. More people could take part. And it would be fun!
- Jack It wouldn't be much fun for me. I hate running.
- Dani Don't be so lazy!
- Anna We could do both: a sponsored run and a talent show.
- Jack That's true. We don't have to choose, do we?
- Dani Fine! I'll organise a sponsored run. You can organise a talent show. And we'll see who raises the most money!
- Anna OK. Let's do that. So, when is Red Nose Day?
- Jack It's in two weeks' time. So we'd better start organising!