



Read the article and do the tasks that follow.

### A Very Bright Idea

The sun makes life on Earth possible. Almost all plants and animals rely on its warmth and heat to stay alive. For us humans, it also provides many simple pleasures such as long summer evenings, bright winter days and the feeling of warm sunlight on our faces. Imagine the frustration of living somewhere where, even when the sun is shining, people can't feel its heat or appreciate its light. The town of Rjukan, in Norway is just such a place.

For six months of the year, Rjukan, a town of 3,500 people located 100 miles west of Oslo, is cut off from direct sunlight by the steep forested hills that surround it. (1.) Of course, many Scandinavian towns and cities suffer from freezing cold temperatures in the winter months, but Rjukan's residents\* have had to cope with a complete lack of sunlight as well. In an early attempt\* to find a solution to this problem, a cable car was built in 1928, which allowed the town's citizens to ride to the top of the hill and top up\* their vitamin D.

These days, however, the people of Rjukan can stand in their central square and enjoy the warmth and the light of the winter sun. How is this possible? What has changed? Well, the answer might seem like something from a science fiction story, but in fact it is reality. Authorities have placed three giant mirrors on top of the hills surrounding the town to reflect light down into the valley. (2.) As a result of this investment the town now benefits from a 600-square-metre area of light which brightens the central square. 'We think it will mean more activities in town, especially in autumn and wintertime,' said Karin Roe, head of the town's tourist office. 'People will be out more.'

The mirrors are controlled by a computer to follow the sun and adjust to the best angle\* to catch the rays\* and reflect them onto the centre of the town. (3.) \_\_\_\_\_ However, it was only made possible with modern technology. Solar panels power equipment to automatically wash the mirrors and move them into position.

Steinar Bergsland, the town's mayor said, 'It is really special to stand in the light down on the square and feel the heat. This is for the pale little children of Rjukan.' A message on the Rjukan tourist website states, 'The square will become a sunny meeting place in a town which is otherwise in the shade.'\*









(4.) A similar project was completed in Italy in 2006, when the residents of Viganella installed mirrors on the hills above their village to take advantage of the sunlight that shone there.

#### GLOSSARY

residents (n) – the people who live in a particular place or building

attempt (n, v) – try (n, v)

to top up (v) – to increase the level of something and make it full again, e.g. a drink or your mobile phone credit angle (n) – the space between two straight lines that join each other; you measure it in degrees, e.g. 30, 45, 90

**ray** (n) – a straight, narrow line of light, e.g. from the sun, the moon or a laser; promień

shade (n) – slight darkness or protection from the sun made by something blocking it, e.g. an umbrella

# Task 1. Read the article quickly and choose the newspaper section that it should <u>NOT</u> appear in.

- 1 Environment news
- 2 Technology news
- 3 Tourism news
- 4 Winter sports news
- **5** Scandinavian news

## Task 2. Read the article again. Complete gaps 1–4 with sentences A–E. There is one

#### extra sentence.

- A The huge mirrors were carried there by helicopters, as part of a project which cost 5 million kroner (£500,000).
- **B** This happens because between September and March the sun is so low in the sky that its light and warmth don't reach the small town in the bottom of the valley.
- C Environmentalists disapprove of the project, however.
- D However, Rjukan is not the only place to benefit from this kind of scheme.
- E The idea was first suggested 100 years ago by Sam Eyde, who was responsible for building the town of Rjukan.

Gap 1	
Gap 2	
Gap 3	
Gap 4	









#### Task 3. Read the article again. Choose the correct answer A–D.

- 1. Which is true about the importance of the sun?
  - A It prevents humans from becoming frustrated.
  - **B** It is both practical and pleasant for people.
  - C Its warmth is appreciated everywhere on Earth.
  - **D** Every animal and plant needs it to live.
- 2. For half a year the town of Rjukan in Norway
  - A doesn't get direct sunlight because of its location.
  - **B** isn't the only Scandinavian town without sunlight.
  - C hasn't been able to find a solution to its problem.
  - **D** doesn't allow its citizens to stay in the valley.
- **3.** Now the people of Rjukan
  - A can finally stand in its central square.
  - **B** are able to feel the sun in winter.
  - C have sunlight everywhere in the town.
  - **D** are organising more activities in cold months.
- 4. The newly installed giant mirrors
  - A make the town of Rjukan unique.
  - **B** can wash and move themselves.
  - C give the town a new meeting place.
  - **D** aren't a completely new idea.

#### Task 4. Match the beginnings with the correct endings to make extracts from the text.

- a of the sunlight that shone there. d for building the town of Rjukan.
- **b** *from* a 600-square-metre area of light ...
- *for* building the town of Rjuk *to* the best angle to catch
  - the rays ...
- **c** *with* a complete lack of sunlight ...
- f *from* freezing cold temperatures in the winter ...

	many Scandinavian towns suffer	f
1	The mirrors () adjust	
2	They installed mirrors () to <i>take advantage</i>	
3	the town now <i>benefits</i>	









4	Sam Eyde () was responsible	
5	residents have had to <i>cope</i>	

#### ANSWER KEY

Task 1.

**3** Tourism news

Task 2.

Gap 1. A	Gap 2. B	Gap 3. E	Gap 4. D	
Task 3.				
1. A	2. B	3. B	4. D	
Task 4.				
1. e	2. a	3. b	4. d	5. c



