NOT BORING MEDIA

THE TOWN THAT LIVES IN DARKNESS

High-Interest Nonfiction Reading Passage

WHAT'S INCLUDED

✓ Reading Passage ✓ Comprehension Questions
✓ Answer Key ✓ Teacher Guide

GRADES 4-6 • LEXILE ~750L • DOK LEVELS 1-4

Reading they'll actually do.

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WHAT'S INCLUDED

✓ High-interest nonfiction reading passage (300-400 words)

✓ 6 comprehension questions spanning DOK levels 1-4

✓ Complete answer key with explanations

✓ Teacher guide with standards, pacing, and extensions

Questions or feedback? Leave a review or message us through TPT!

THE TOWN THAT LIVES IN DARKNESS

Every year on November 18, the sun sets over Rjukan, Norway—and doesn't rise again until late January. For about two months, the entire town exists in polar night, surrounded by mountains so steep that even when the sun returns, it can't reach the valley floor until March.

Rjukan sits at the bottom of a deep, narrow valley in southern Norway. The mountains rise sharply on all sides, creating a beautiful but shadowy landscape. In summer, the town enjoys long days and lush green hillsides. But in winter, the geometry of the valley conspires against it. The sun's low angle means its rays simply cannot clear the mountain peaks.

For over a century, residents accepted darkness as part of life. They hiked to sunny spots on the mountainside or drove to higher elevations just to feel sunlight on their faces. Some installed special "happy lights" in their homes to combat seasonal depression. Children grew up knowing that winter meant months of navigating by streetlights and headlamps.

Then, in 2013, the town tried something extraordinary: they built giant mirrors.

Three enormous computer-controlled mirrors, called heliostats, were installed on the mountainside 450 meters above the town square. The mirrors track the sun's movement across the sky and redirect its rays downward into the valley. Each mirror is 17 square meters—about the size of a small bedroom—and tilts automatically throughout the day.

The result isn't perfect. The mirrors illuminate only a small area of the town square, creating a circle of artificial sunlight about 600 square meters wide. On clear days, residents gather in this bright spot like plants turning toward light, soaking in reflected sunshine for a few precious hours.

The mirrors cost roughly $850,000—funded partly by the town and partly by private donations. Critics called it an expensive gimmick. Supporters said it transformed their winters.

Residents describe the psychological impact as profound. Even though the light is reflected rather than direct, even though it only covers a small area, its presence changes everything. The mirrors have become a symbol of human creativity—proof that sometimes, when nature says no, ingenuity can find another way.

Word Count: 352 | Lexile: ~750L | Grades 4-6 | Source: The Guardian

COMPREHENSION QUESTIONS

Name: _____ Date: _____

1 **Why doesn't sunlight reach Rjukan's valley floor during winter?**

- ◯ A) The town is too far north to receive any sunlight
- ◯ B) Steep mountains block the low winter sun
- ◯ C) Heavy clouds cover the town all winter
- ◯ D) The town is underground

2 **What solution did the town implement in 2013?**

- ◯ A) They moved the entire town to higher ground
- ◯ B) They installed giant computer-controlled mirrors
- ◯ C) They built a tunnel to a sunnier valley
- ◯ D) They created artificial suns with powerful lights

3 **What does the phrase 'the geometry of the valley conspires against it' suggest?**

- ◯ A) The valley was poorly designed by engineers
- ◯ B) The valley's shape naturally blocks sunlight
- ◯ C) Someone planned to keep the town dark
- ◯ D) The valley is getting narrower over time

4 **According to the passage, what is ONE limitation of the mirror system?**

- ◯ A) It only works during summer months
- ◯ B) It illuminates only a small area of about 600 square meters
- ◯ C) It makes the town too hot
- ◯ D) It stopped working after one year

5 **The passage mentions that some people called the mirrors 'an expensive gimmick' while others said they 'transformed their winters.' What evidence does the author provide to support both perspectives?**

6 **The passage ends by calling the mirrors 'proof that sometimes, when nature says no, ingenuity can find another way.' Do you think this kind of technological solution to natural challenges is always a good idea? What are the benefits and potential drawbacks of engineering our way around nature's limitations?**

ANSWER KEY

The Town That Lives in Darkness

1. B) Steep mountains block the low winter sun

DOK 1 — Recall. The passage states: 'The sun's low angle means its rays simply cannot clear the mountain peaks.'

2. B) They installed giant computer-controlled mirrors

DOK 1 — Recall. The passage states: 'Three enormous computer-controlled mirrors, called heliostats, were installed on the mountainside.'

3. B) The valley's shape naturally blocks sunlight

DOK 2 — Figurative language. 'Conspires' personifies the valley, but the meaning is that the natural shape of the valley (the geometry) works against receiving sunlight.

4. B) It illuminates only a small area of about 600 square meters

DOK 2 — Text evidence. The passage states: 'The mirrors illuminate only a small area of the town square, creating a circle of artificial sunlight about 600 square meters wide.'

5. Sample Response:

For critics: The mirrors cost $850,000 and only illuminate a small area (600 square meters) for 'a few precious hours' on clear days—limited impact for high cost. For supporters: The passage describes residents gathering in the light 'like plants turning toward light' and calls the psychological impact 'profound.' Even reflected light 'changes everything.' The author presents both sides but seems sympathetic to supporters.

6. Sample Response:

Answers will vary. Benefits: improves quality of life, demonstrates human creativity, can address problems that seem impossible. Drawbacks: expensive ($850,000), may not fully solve the problem (only a small area lit), could create dependency on technology, might distract from addressing root causes (like whether to build towns in such locations). Strong responses will weigh both sides and consider when technological solutions are appropriate versus when we should accept natural limitations.

TEACHER GUIDE

The Town That Lives in Darkness

STANDARDS ALIGNMENT

- CCSS.ELA-LITERACY.RI.4.1 — Refer to details and examples in a text
- CCSS.ELA-LITERACY.RI.5.4 — Determine meaning of words and phrases
- CCSS.ELA-LITERACY.RI.5.8 — Explain how author uses evidence
- NGSS — Connections to scientific practices
- C3 Framework — Historical thinking skills

PACING OPTIONS

- Quick Read (10-15 min): Passage + questions 1-4
- Standard (20-25 min): Full passage + all questions
- Deep Dive (35-40 min): Add discussion + extension

DISCUSSION QUESTIONS

- Rjukan built giant mirrors to bring sunlight to their town square. When is it worth engineering around nature's limitations?
- The mirrors cost $850,000 to light a small area. Critics called it a 'gimmick.' How do we decide if something is worth the cost?
- How might months of darkness affect a community's mental health, relationships, and culture?

EXTENSION ACTIVITIES

- Engineering: Research how the Rjukan mirrors work. Design an improved system or alternative solution.
- Research: Find another community that engineered around a natural limitation. Compare their approaches.
- Writing: Write a journal entry from a Rjukan teenager describing the first day of darkness and the first day of mirror light.

DIFFERENTIATION

- Struggling: Pre-teach vocabulary, partner reading
- Advanced: Add research, compare to related events
- ELL: Visual supports, pre-teach context

SOURCE

- The Guardian / Reuters