




THE BRIDGE RIDDLE

Before You Read

수학을 활용하여 일상생활의 문제를 해결한 경험이 있는지 생각해 봅시다.



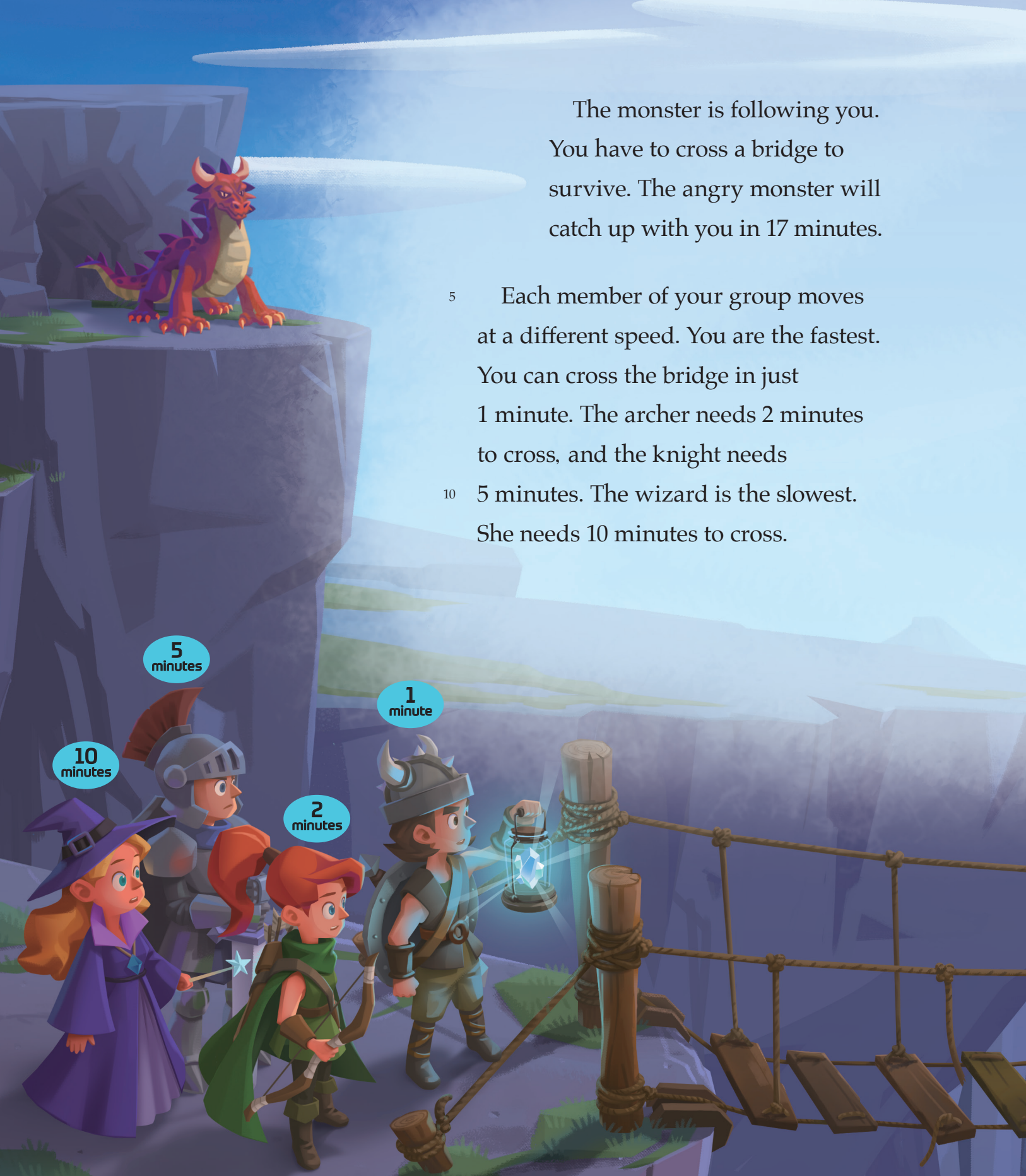


You, a brave warrior, are leading a wizard,
an archer, and a knight on an adventure. The
four of you are searching for a magic stone
that always shines brightly.

- 5 One dark night, you find the magic stone
in a cave in a mountain. However, you
accidentally wake up a monster when you
pick it up. The monster looks very angry.
Uh-oh! Now you must run away!

Q1 What are they searching for?

riddle wizard warrior archer knight
cave accidentally run away



The monster is following you.
You have to cross a bridge to survive. The angry monster will catch up with you in 17 minutes.

- 5 Each member of your group moves at a different speed. You are the fastest. You can cross the bridge in just 1 minute. The archer needs 2 minutes to cross, and the knight needs
- 10 5 minutes. The wizard is the slowest. She needs 10 minutes to cross.

5
minutes

1
minute

10
minutes

2
minutes

Q2 Who is the slowest of the four?

cross survive catch up with speed



You need to remember a few things.

1. It is so dark that you need the light from the magic stone to cross the bridge.
2. The bridge is not very strong, so only two of you can
5 cross safely at a time.
3. All of you must reach the other side of the bridge in
17 minutes. If you all get there, you can cut the ropes.
This way, the monster cannot follow you.

How can everyone cross the bridge in 17 minutes?

- 10 The answer is on the next page. Take a moment to think
before you check the answer.

Have you figured it out? Then turn the page.

☆☆ Try It Yourself

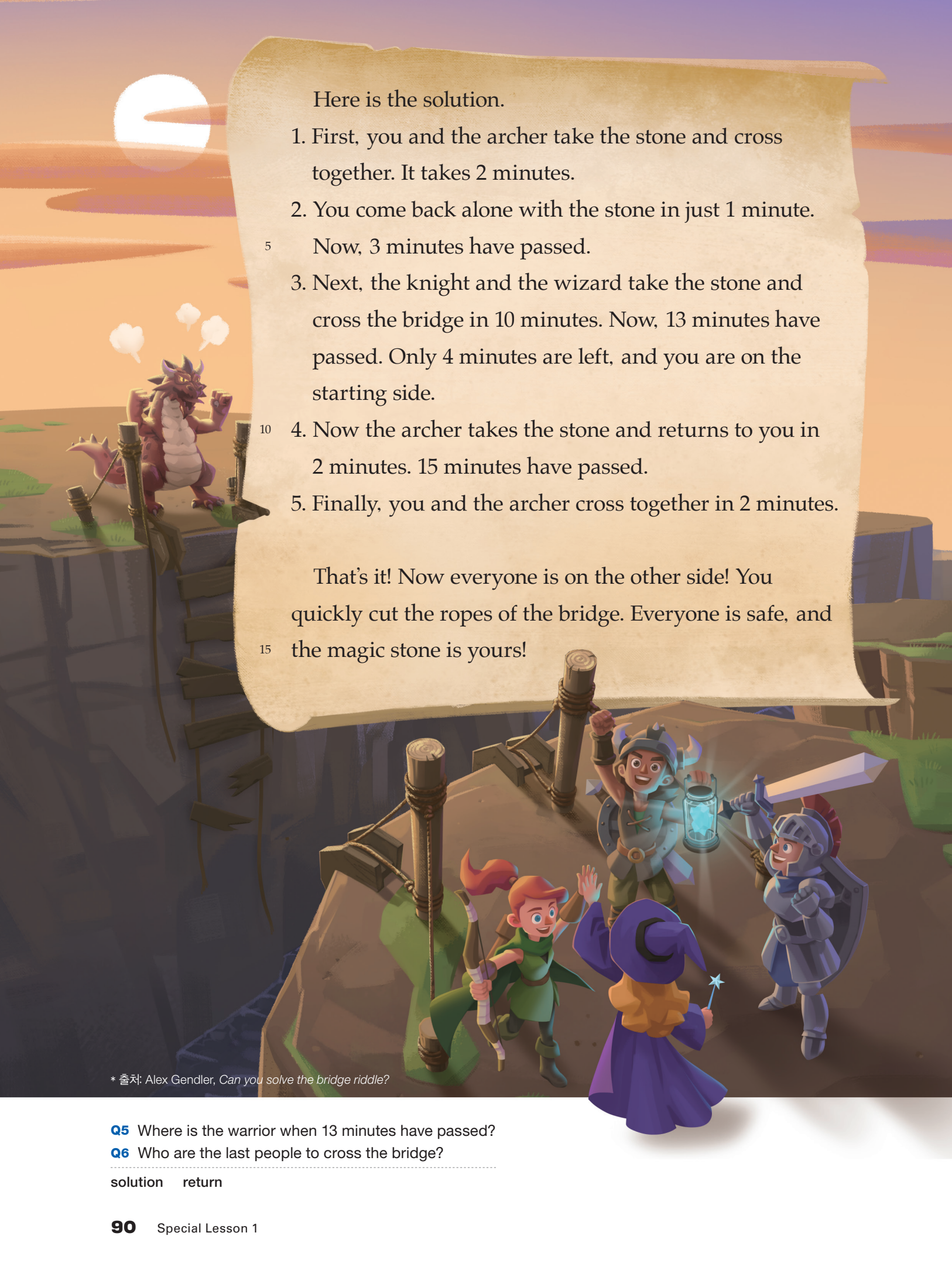
종이 인형은 이용하여 제한 시간
안에 모두가 다리를 건널 수 있는
방법을 생각해 봅시다.

활동 보조 자료 2

Q3 Why do they need the light from the magic stone to cross the bridge?

Q4 How many people can cross the bridge safely at a time?

at a time reach rope figure out



Here is the solution.

1. First, you and the archer take the stone and cross together. It takes 2 minutes.

2. You come back alone with the stone in just 1 minute.

5 Now, 3 minutes have passed.

3. Next, the knight and the wizard take the stone and cross the bridge in 10 minutes. Now, 13 minutes have passed. Only 4 minutes are left, and you are on the starting side.

10 4. Now the archer takes the stone and returns to you in 2 minutes. 15 minutes have passed.

5. Finally, you and the archer cross together in 2 minutes.

That's it! Now everyone is on the other side! You quickly cut the ropes of the bridge. Everyone is safe, and
15 the magic stone is yours!

* 출처: Alex Gendler, *Can you solve the bridge riddle?*

Q5 Where is the warrior when 13 minutes have passed?

Q6 Who are the last people to cross the bridge?

.....
solution return

After You Read

A 본문 내용을 잘못 말하고 있는 인물을 모두 골라 봅시다.



Warrior

I'm the leader of the group for this adventure.



Wizard

If we are not careful, the light of the magic stone will go out.



Archer

I'm the second fastest in the group.



Knight

The bridge is so strong that we can all cross it at the same time.

B 본문 내용과 일치하도록 빈칸에 알맞은 인물과 소요 시간을 써 봅시다.

Action	Starting Side	Ending Side	Time
The warrior and the archer take the magic stone and cross the bridge.	Knight, Wizard	Warrior, Archer	2 minutes
The 1 _____ returns alone with the stone.	Knight, Wizard 2 _____	3 _____	1 minute
The knight and the wizard take the stone and cross the bridge.	4 _____	5 _____, Knight, Wizard	6 _____ minute(s)
The 7 _____ takes the stone and returns to the warrior.	Warrior, 8 _____	9 _____, _____	2 minutes
The warrior and the archer cross together.	No one	Knight, Wizard, Warrior, Archer	2 minutes

17 minutes in total