



# R-project

三年級



姓名：\_\_\_\_\_ 3\_\_\_\_\_ ( )

日期：\_\_\_\_\_

# 《彩虹》

肖銘老師

也不知道  
是哪個  
淘氣的孩子  
又在空中  
塗上了七色顏料

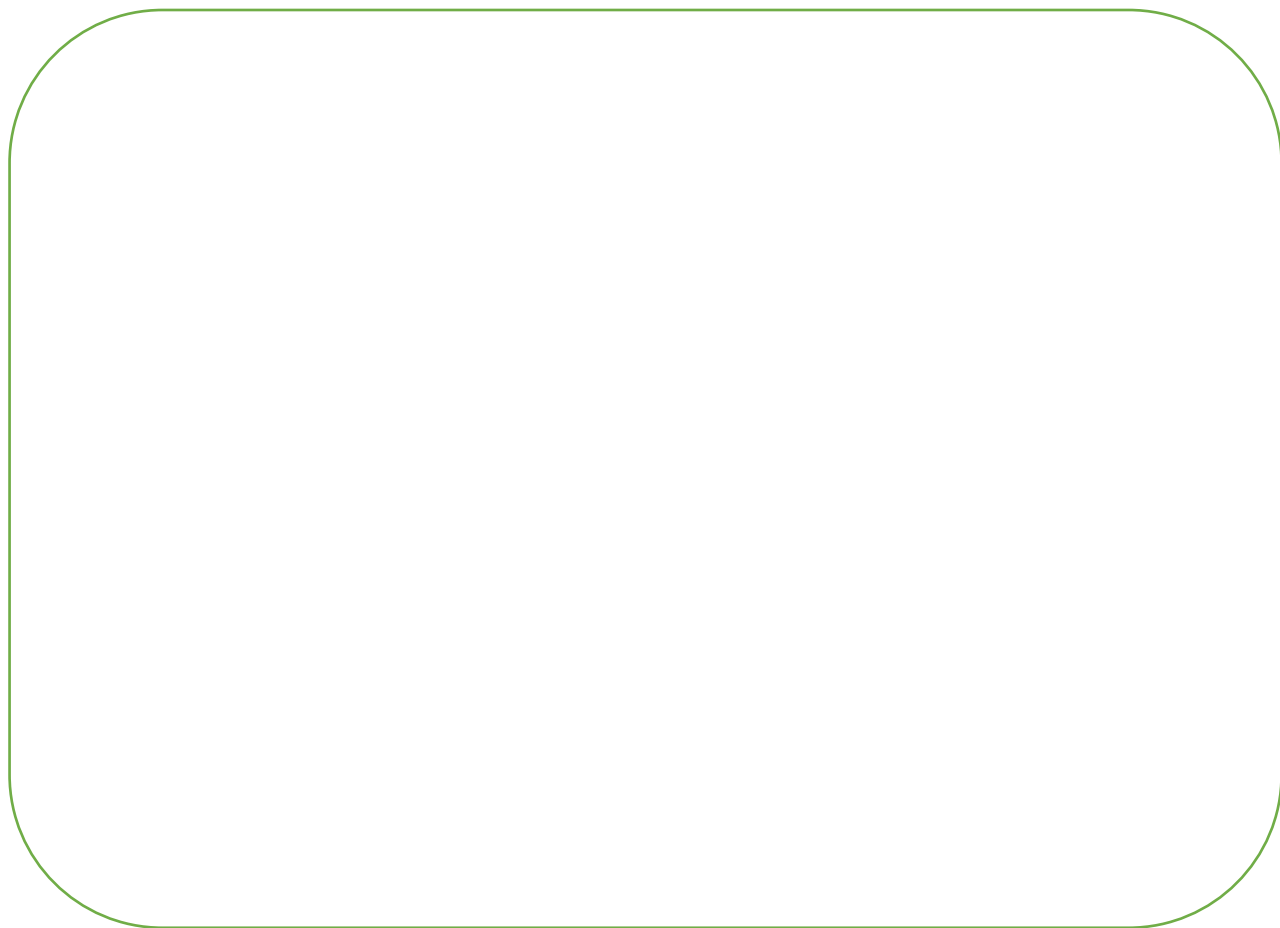
或許  
你稚嫩的小手  
還少了力道  
只留下這  
淡淡的痕跡

可惜  
你瞬間就擦去了  
幾痕斑斕  
非  
你不滿意  
自己的作品

日期：\_\_\_\_\_

# 雨後彩虹

我看到彩虹了，我希望把彩虹畫出來。



請把形成彩虹的要素填上顏色。

大叫

雨點

強風

陽光

食物

背向  
太陽

面向太  
陽光

# The Colours of the Rainbow

(Adapted from a Native American Legend)

Once upon a time all of the colours started to argue. Green, blue, yellow, orange, red, indigo, and violet fought over who was the most beautiful. Each colour wanted to be everyone's favorite.

5 Green spoke first. "Look around you. See the grass and the trees. I am the colour of Earth. Without me, no animal could live. Look at the farms in the countryside. Look at the forests. I am more places on Earth than any of you."

10 Blue broke in with a joke. "You are only **Green with envy.**" All of the colours laughed. Blue was the friendliest of the colours. He continued, "You may be on land, but think of me! I am the colour of the ocean and the sky. I am the water people drink and the air  
15 they breathe. I am the rain that makes trees and flowers grow. I bring kindness and serenity."

Yellow danced around and said, “Yes! You may be the colour of the sky, but the sky would never be blue without me! I splash the world with puddles of  
20 sunlight, not rain! I bring happiness. Without me, Green, your grass would never grow. I am sunflowers, sunshine, and smiles!”

Orange came next. In a very serious voice, Orange said, “Yellow, you play too much. I am the most  
25 beautiful. Who has never paused to see a beautiful sunset? I bring happiness at the end of the day. I am rare, but precious, like a great gem.”

Then Red interrupted with a yell, “Listen to me! I am strength! I am power in battle. I am the colour of  
30 blood that pumps in the heart and brings life. I am fire and passion. Who could ever fall in love without red? Who could ever smell the beautiful rose?”

Purple spoke and everyone listened. Purple was very respected among the colours. “Colours, I am the  
35 colour of royalty. My depth is great. I combine the power of Red with the kindness of Blue. Through the ages, I have been the colour of wisdom.”



Finally, the timid voice of Indigo joined the conversation. Indigo was quiet, but determined. "I, too,  
40 am important. I am the colour that fills the sky before blackness. I am the colour in the depths of the sea. The deepest thoughts are shaded Indigo. I bring philosophy."

The colours kept quarreling. They all started speaking  
45 at once. Rain heard the noise and became angry. He made lightning crash from the sky. All the colours huddled together in fear. Rain scolded the colours:  
"What are you fighting about? You are all special. You are all different. None of you is the best. Without all of  
50 the colours, the world would be sad."

Rain told the colours to hold hands as a sign that they were friends again. But Rain would not let the colours forget his lesson. From then on, after big storms, Rain made the colours join hands in the sky. In the rainbow,  
55 all the colours are together as a symbol of peace and hope.

**Circle the correct answer (Q1-5).**

1. What happened first?

- A. The colours were angry with each other.
- B. Rain scolded the colours.
- C. The colours joined hands.
- D. Rain made a crash of lightning.

2. In the story, what is the cause of rainbows?

- A. Rain teaches the colours a lesson.
- B. Lightning crashes from the sky.
- C. Colours are unable to agree on which is most beautiful.
- D. Blue is the colour of the rain, sea, and sky.

3. What does Green mean when he says, "No animal could live without me"?

- A. Green is the favorite colour of animals.
- B. Animals need farms to live.
- C. Animals need green plants to eat.
- D. Animals can only see green.

4. To be "Green with envy" (line 8) means

- A. to be green
- B. to want money
- C. to be jealous
- D. to grow

5. This passage is mostly about
- A. Native American traditions
  - B. why there are rainbows
  - C. why indigo is the most important colour
  - D. different legends about rainbows

6. The question below is an incomplete sentence. Choose the answer that complete the sentence.
- Rain made all of the colours form a rainbow \_\_\_\_\_ they were arguing.
- A. also
  - B. without
  - C. while
  - D. because

**Answer in complete sentences (Q7-8).**

7. Why did Rain make lightning crash from the sky?

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8. What do the colours in the rainbow mean?

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# 自製彩虹

紙條上原本的圖案

紙條上最後的圖案



# 彩虹小知識

## 彩虹不是拱型？

太陽光透過空氣中小水滴的折射與反射，所分解而成的七色圓環。



飛機上向下看的話，能發現彩虹其實是圓弧的形狀。



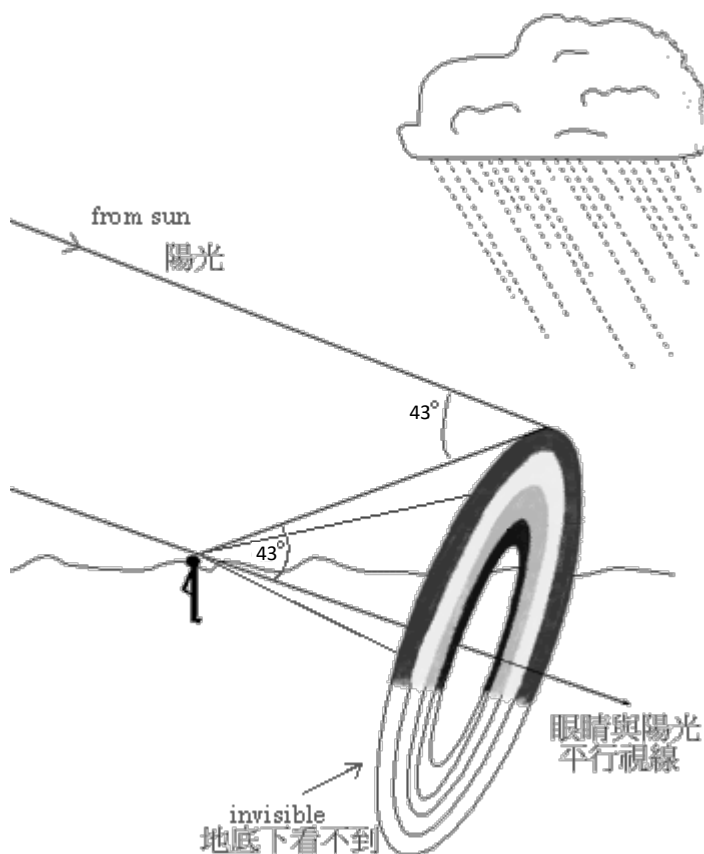
平時看見的都是被地平線阻擋的不完整的彩虹。

既然彩虹來自空氣中的水滴，為什麼不會整個天空都是彩虹？

每種有色光都有它特定的折射角度

如紅光是 $43^\circ$

所有與我們視線呈 $43^\circ$ 的水滴組合起來，剛好是呈現一個弧形。



日期：\_\_\_\_\_

# 奇怪的紫外線

\*我（可以 / 不可以）用紫外光燈，照射同學或自己的眼睛\*

請把用紫外光照在20元紙幣時出現的圖案畫在下面的紙幣上。



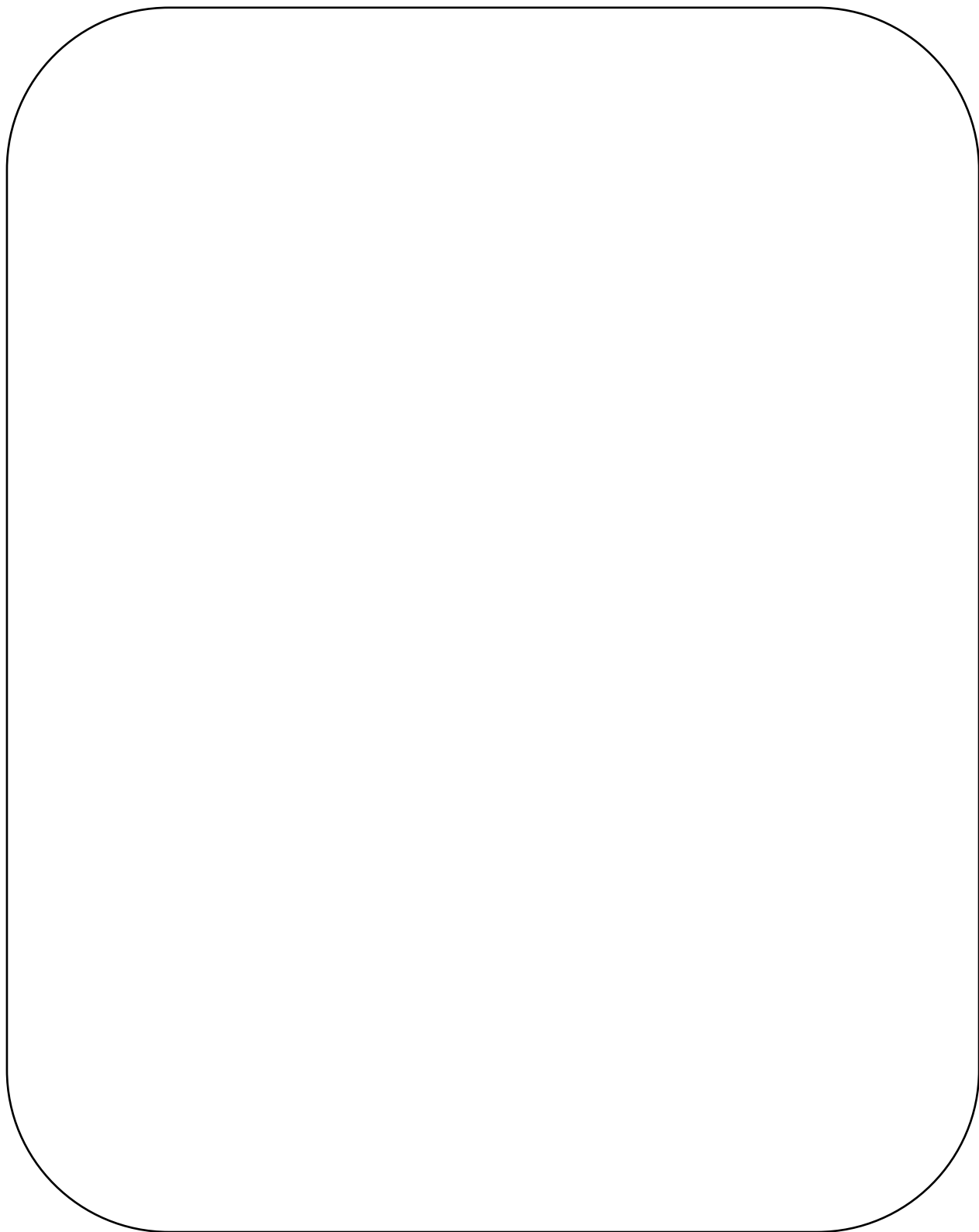
為甚麼政府要在紙幣上加上這些平時看不見的特徵呢?(請圈出答案)

因為要令紙幣更漂亮 / 令壞人更難自己在家印紙幣 / 令小朋友開心。

日期：\_\_\_\_\_

# 奇怪的紫外線

我看到的跳飛機樣子是：



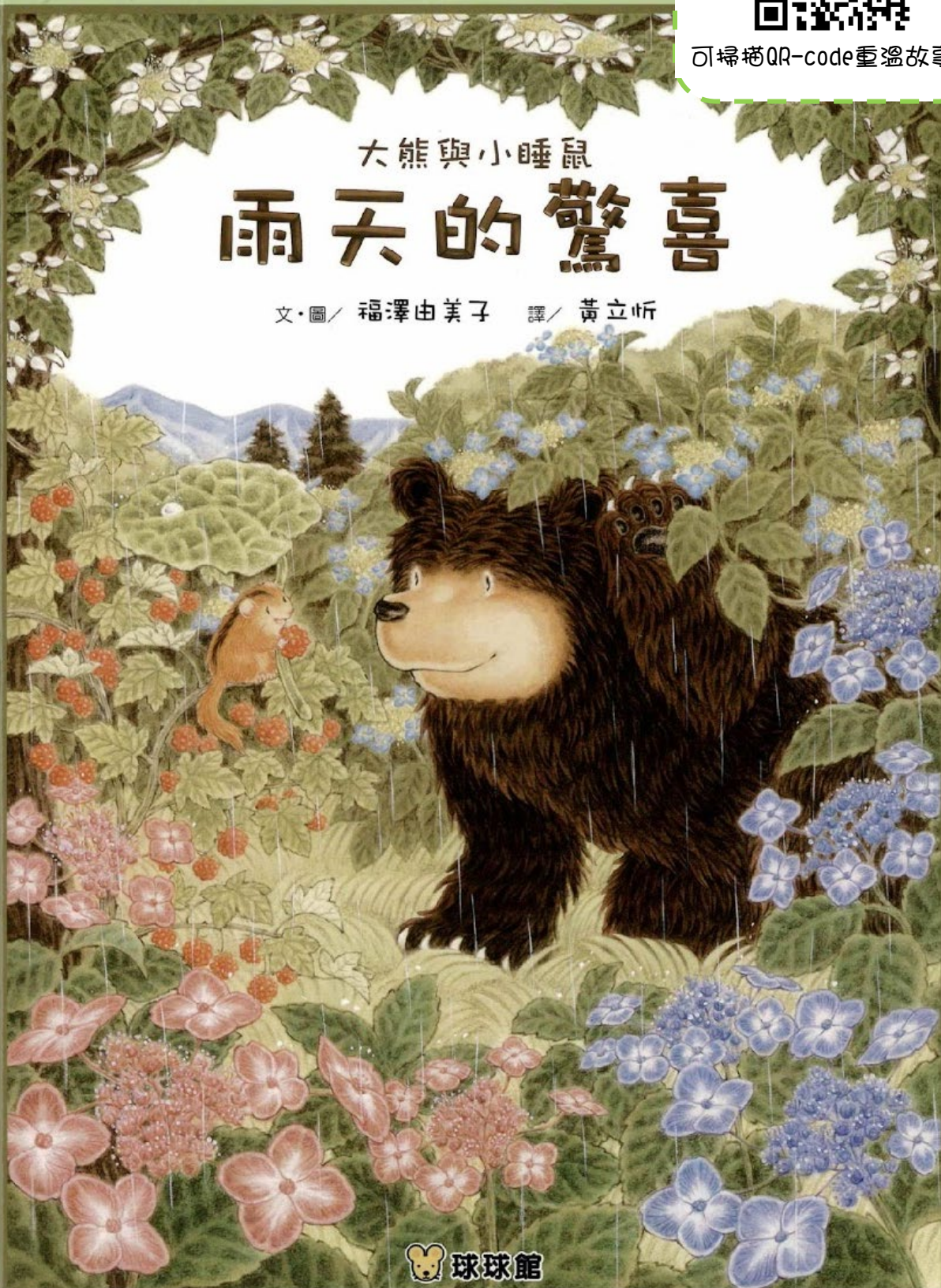
日期：\_\_\_\_\_



可掃描QR-code重溫故事

# 大熊與小睡鼠 雨天的驚喜

文・圖／福澤由美子 譯／黃立昕















 球球館



日期：\_\_\_\_\_

# 微小的世界

請在下圖畫出經過顯微鏡看見的物件影像。

<p>貼紙</p>  	<p>布料</p>  	<p>金莎朱古力包裝紙</p>  
<p>自由觀察( )</p>  	<p>自由觀察( )</p>  	<p>自由觀察( )</p>  

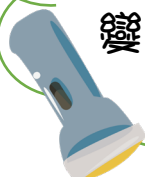
在顯微鏡下看事物與正常看見的事物(相同 / 不相同)。

# 光光結合了

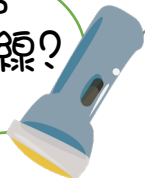
\* 我知道（應該 / 不應該）用放大鏡望向太陽 \*

\* 我也知道（應該 / 不應該）用電筒照向眼睛 \*

請連上正確的答案。



請把產生紅色光的電筒與綠色光的電筒照在同一地方，看看會變成甚麼顏色的光線？



請把產生綠色光的電筒與藍色光的電筒照在同一地方，看看會變成甚麼顏色的光線？

紅色

橙色

綠色


黃色

藍色


白色

淺藍色

紫色



請把產生藍色光的電筒與紅色光的電筒照在同一地方，看看會變成甚麼顏色的光線？



請把產生三支電筒的光都照在同一地方，看看會變成甚麼顏色的光線？

