



SCIENCE INVESTIGATION · LIGHT

How does our shadow change during the day?

England national curriculum · Year 3 · working scientifically

Our question

How does the length of a shadow change from morning to home time?

My prediction — what do you think will happen, and why?

What we will **MEASURE**, again and again
the length of the same object's shadow
(cm)

What we will **KEEP THE SAME**

- the same object
- the same spot (mark it with chalk)

Equipment

- ☐ a playground object or metre stick
- ☐ tape measure

- ☐ chalk
- ☐ a sunny day

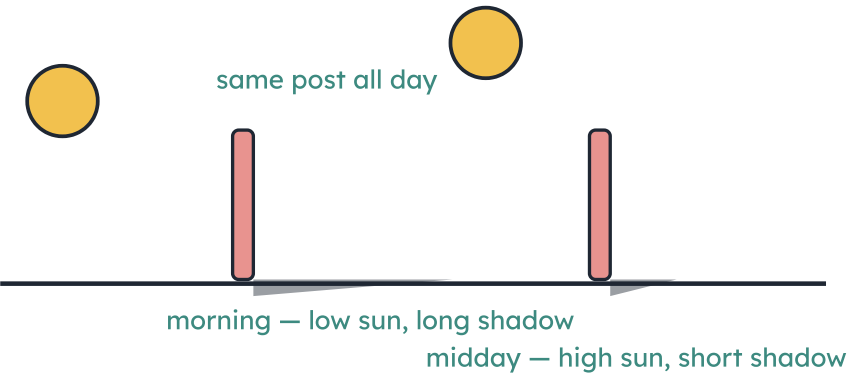
Running it: undefined

Keep it safe: undefined



STEP 2 · DO IT AND RECORD

Our results



Time	Shadow length (cm)	What I noticed
9 am		
11 am		
1 pm		
3 pm		

Units live in the headings, so the boxes only need numbers. Record at the same times, in the same way, every time.



STEP 3 · DRAW THE PICTURE OF YOUR RESULTS

Bar chart of our results

A bar chart suits results you can compare side by side. Number the axis in equal steps and give every bar the same width.

Shadow length (cm) — what we measured



Time of day — what we recorded

What does your chart show? Say it in one sentence.



STEP 4 · WHAT DID WE FIND OUT?

Our conclusion

I found out that...

I think this happened because...

My results show...

How did it go?

What went well...

What I would change next time...

A new question I could investigate...
