

GRADE 3 LEARNING PACK

The Shadow Clock Question

Read for evidence, scientific caution and the difference between observation and overclaim.

LEARN • PRACTISE • CREATE • REFLECT

Original BrightPencil Kids resource - adult-led where appropriate

A4 edition • 12 purposeful pages • review copy

Print. Learn. Grow.

Grown-up guide

Learning objective

Read for evidence, scientific caution and the difference between observation and overclaim.

Use this pack well

- Model the first example aloud, then let the learner try.
- Ask “How do you know?” more often than “Are you finished?”.
- Use real objects, talk, movement or observation when the activity suggests it.
- Stop or shorten the session if attention or enjoyment drops.
- Open-ended pages can have many successful answers.

Quality note

This resource was written originally for BrightPencil Kids. Curriculum sources informed scope and progression only; no third-party worksheet or story text is reproduced.

Read the story

PART 1

At morning break, Ana traced the shadow of a short pole on a large sheet of paper. At lunchtime she traced it again.

PART 2

The second shadow pointed in a different direction and was shorter. Ana called her drawing a “shadow clock”.

PART 3

Her teacher liked the observation but asked whether two traces were enough to make a reliable clock.

PART 4

Ana added more observations on several clear days at the same times. She noticed similar patterns, but cloudy weather sometimes prevented a trace.

PART 5

Her project became an investigation of changing shadows rather than a promise that the paper could always tell exact time.

Read story section 1: At morning break, Ana traced the shadow of a short pole on a large sheet of paper. At lunchtime she traced it again.

Read story section 2: The second shadow pointed in a different direction and was shorter. Ana called her drawing a “shadow clock”.

Read story section 3: Her teacher liked the observation but asked whether two traces were enough to make a reliable clock.

Read story section 4: Ana added more observations on several clear days at the same times. She noticed similar patterns, but cloudy weather sometimes prevented a trace.

Read story section 5: Her project became an investigation of changing shadows rather than a promise that the paper could always tell exact time.

Try it beyond the page

Real-world / hands-on connection

Retell the text in five key events, then identify one sentence that carries the central idea.

Before you finish

What did you notice?

What evidence, object or example helped you?

What would you change if you tried again?

Create something

Your project

Create a six-frame storyboard or evidence map that shows the turning point and the final learning idea.

Use this space for planning, drawing, mapping, designing or notes.

CHALLENGE

Think deeper

1. What changed between morning and lunchtime?

2. Why did Ana collect more observations?

3. Why did she rename the project idea?

Quick review

1. In one sentence, explain the big idea of “The Shadow Clock Question”.

2. Draw or write one example that shows you understand.

3. Choose one activity from this pack and explain the strategy you used.

4. Write one question you still have.

Answer & discussion notes

Use these as guidance, not scripts. Open questions can have different successful responses when the reasoning is sensible and evidence-based.

1. Suggested response

Use details directly stated or strongly supported by the story.

2. Suggested response

Equivalent evidence-based wording is acceptable.

3. Suggested response

Open responses should distinguish evidence from unsupported guess.

Review before publication

Check age fit, factual accuracy, clarity, accessibility, rights provenance and whether the activity works in practice. This file remains a review copy until those checks are signed off.

FINISH

My learning reflection

I finished this BrightPencil learning pack.

One thing I understand better now:

A strategy that helped me:

Something I created or noticed:

My next small question or goal:

Print. Learn. Grow.