# Can a Shadow Really Predict Spring?

## Classroom Companion

By Sheryl Dotson | Magsico Press | Ages 5-8 | Grades K-2



**Designed to accompany Can a Shadow Really Predict Spring? by Sheryl Dotson. Access to the book is required for the complete lesson.**

### Inside this companion

Start Here ..... 2
One Complete Lesson ..... 3
Read Aloud Guide ..... 4
Optional Activities and Expanded Sessions ..... 5-8
Student Pages ..... 9-12
Answer Guidance ..... 13
Sources and Permissions ..... 14

Free printable for personal, family and classroom use.

TEACHER GUIDE | START HERE

# Start Here

***Can a Shadow Really Predict Spring?***

Designed to accompany **Can a Shadow Really Predict Spring?** by Sheryl Dotson. Access to the book is required for the complete lesson.

**Required book:** First edition, 2026, Magsico Press; 32 pages.
**Paperback ISBN:** 979-8-9823392-1-8.
**Audience:** Ages 5-8, grades K-2. Grade 3 challenges are optional.

**Essential question:** Can a groundhog's shadow predict spring?
**Lesson goal:** Children will use a shadow observation and a story detail to explain that a shadow shows blocked light, not when spring will arrive.

## Materials and preparation

One book for the read-aloud; one flashlight, opaque standing toy and sheet of white paper per group of 3-4, or one demonstration set; pencils and crayons. Read the book and test the setup on page 3. Keep flashlight beams away from eyes; never look directly at the Sun.

## Core lesson printing

Print **page 10**, one copy per learner. Keep one teacher copy of pages 2-4 and 13-14. **No-print choice:** observe the demonstration, trace on scrap paper and explain orally.

| Optional activity | Print only if chosen |
|---|---|
| Retell the opening (page 5) | Page 9: one per learner |
| What Did Gus Learn? (page 7) | Page 11: one per learner |
| Calendar Math (page 8) | Page 12: one per learner |
| Signs of Spring / Outdoor Shadows (page 8) | No worksheet; use scrap paper |

One complete lesson is on page 3. Optional activities work independently after reading the book. An optional expanded alternative is on page 6. Print selected pages at actual size on US Letter paper; teacher pages are not copied for every child. This companion is a separate download, not part of the retail book.

Copyright 2026 Sheryl Dotson | Magsico Press

TEACHER GUIDE | ABOUT 45 MINUTES | K-2

# One Complete Lesson

***Can a Shadow Really Predict Spring?***

**Question:** Can a shadow really predict spring?
**Goal:** Explain, using an observation and the story, what a shadow can tell us.
**Print:** page 10, one per learner. Materials: book, flashlight, opaque standing toy, white paper and pencils.

## Prepare the investigation

Keep toy and paper fixed. Start with the light low to the side, above the toy's top, aimed at the toy. Raise the light vertically over the same table position while aiming at the toy. Test that both shadows fall on the paper. Keep beams away from eyes; never look at the Sun.

## Introduce and read - 22 minutes

Invite a prediction from the title. Read the full story, printed book pages 4-27. Pause briefly at pages 10-11 (the traditional saying), 18-19 (long and short shadows), and 24-25 (what Gus learns). Ask: What changed? What did Gus notice? Use the vocabulary and discussion prompts on page 4 as needed.

## Explore and discuss - 18 minutes

Revisit book page 31. Children predict, then observe the low-light shadow and draw it on page 10. Raise the light as prepared; draw the second shadow. Keep toy, paper and the light's horizontal position fixed. Compare. Ask: What stayed the same? What changed? How does this help explain Gus' long and short shadows on pages 18-19? A shadow shows where light is blocked now; it cannot tell when spring weather will arrive.

## Reflect - 5 minutes

Return to the opening question. Children tell, draw, point, act or write: A shadow shows _____. I know because _____. Invite one detail from the investigation or the book, then connect the two together.

## Notice understanding and adapt

Look for an explanation that the toy blocks light and that changing the light changes the shadow. Model, read aloud or scribe for support; welcome home-language discussion. No-print: demonstrate and discuss or trace on scrap paper. Stretch: measure the two shadows. Accept actual results and check the setup if they differ. The flashlight models light direction, not the Sun's scale or distance. Answers: page 13.

Timing is an estimate. Allow enough time for the full read-aloud and adjust pacing to the class. The optional activities are not required to complete this lesson.

Copyright 2026 Sheryl Dotson | Magsico Press

TEACHER GUIDE | DISCUSSION

# Read Aloud Guide

***Can a Shadow Really Predict Spring?***

On February 2, Gus mistakes his shadow for something following him. With Rocky's help, he explores sunlight and shade, then discovers why a shadow cannot tell him when spring will arrive.

## Before reading

Look at the cover. Who do you think Gus is? What is Rocky doing?
What is a shadow? Where have you seen one today?
Read the title. Can a shadow really predict spring? Make a prediction.

## During reading

**Pages 10–11:** What does Ralph's sign say? What do you think a shadow is?
**Pages 12–16:** Why does Gus think something is following him? How does Rocky explain it?
**Pages 18–19:** Why is the shadow longer when the Sun is low and shorter when it is higher?
**Pages 22–25:** What is a tradition? What helped Gus change his mind?

## After reading

What did Gus discover by trying things?
Which illustration helps you explain what he learned?
What do you still wonder about shadows or spring?

## Words to discover

**Shadow:** a darker area where something blocks light.
**Predict:** say what you think will happen.
**Observation:** something you notice and can describe.
**Evidence:** observations or information that support an explanation.
**Tradition:** a custom people pass along over time.

References use printed book pages: story pages 4–27; learning pages 28–32. Invite oral, drawn, pointed, acted or written responses. Read directions aloud, welcome home-language discussion, and scribe when helpful.

Copyright 2026 Sheryl Dotson | Magsico Press

OPTIONAL ACTIVITY | ABOUT 15 MINUTES

# Retell the Opening

*Can a Shadow Really Predict Spring?*

## Goal and book connection

After reading the book, children put the opening events in order and explain what Gus discovers later. Revisit printed book pages 4–15; connect the retelling to pages 24–27.

## Materials and printing

Print page 9, one copy per learner; provide pencils. For cutting and sorting, add child-safe scissors and adult help. No-print: use a picture walk and oral retelling.

## Try it

**Revisit (3 min):** Look through the opening pages. What happens before Gus sees his shadow?
**Sequence (8 min):** Read the six cards aloud. Children write 1–6 or cut and sort. Partners explain what happens next, using the pictures and captions.
**Connect (4 min):** The cards stop at the shadow chase. Ask what Rocky explains afterward and what Gus learns by the ending.

## Notice understanding and adapt

Look for the sleep and calendar before the shadow chase. Support with matching book pages, pointing or adult scribing. For more challenge, ask children to describe or draw one later event and explain why it matters. The six-card answer is on page 13.

Copyright 2026 Sheryl Dotson | Magsico Press

TEACHER GUIDE | ALTERNATIVE TO THE SINGLE LESSON

# Optional Expanded Sessions

***Can a Shadow Really Predict Spring?***

Use this alternative if you want more time for reading, investigation and response. It is not an extra prerequisite or a required multi-day sequence. Each additional activity elsewhere in the companion may also be chosen independently after reading the book.

| Optional session | Time | Printing |
|---|---|---|
| Read and Retell | 25 minutes | Page 9: one per learner |
| Explore Shadows | 25 minutes | Page 10: one per learner |
| Explain and Wonder | 22 minutes | Page 11: one per learner |

## Read and Retell - 25 minutes

Introduce the question (3 min); read the full story, book pages 4-27, with brief pauses (12 min); sequence the opening using page 5 directions (7 min); discuss what Gus learns by the end (3 min). Allow more reading time if needed. No-print: picture walk and oral retelling.

## Explore Shadows - 25 minutes

Predict (3 min); revisit book pages 18-19 and 31 (4 min); investigate using the complete setup on page 3 and record on page 10 (15 min); compare findings with Gus' observations (3 min). No-print: demonstration and scrap-paper tracing.

## Explain and Wonder - 22 minutes

Introduce the question (3 min); revisit book pages 22-25 (5 min); complete the optional response on page 11 using page 7 directions (10 min); share an explanation and a wonder (4 min). No-print: respond orally, point or act.

Keep one teacher copy of the relevant directions and page 13 answers. Materials and safety follow pages 2-3, 5 and 7. These times are estimates; adjust to the class. Calendar Math and local observations on page 8 remain separate optional choices.

Copyright 2026 Sheryl Dotson | Magsico Press

OPTIONAL ACTIVITY | ABOUT 15 MINUTES

# What Did Gus Learn?

***Can a Shadow Really Predict Spring?***

## Goal and book connection

Children distinguish the traditional shadow saying from a scientific explanation. Revisit book pages 22-25. Question: What helped Gus change his mind?

## Materials and printing

Print page 11, one copy per learner; provide pencils and crayons. No-print: discuss a shared drawing and respond orally or with thumbs up/down. Children may discuss the book instead of sharing family experiences.

## Try it

**Revisit (3 min):** Read Gus' explanation on pages 24-25. What can a shadow tell us?
**Draw and choose (9 min):** Draw Gus in sunlight and show his shadow. Read the four statements aloud; circle the true ones. Partners explain a choice using the story.
**Share (3 min):** Tell what helped Gus change his mind and name one remaining wonder.

## Notice understanding and adapt

Look for statements 1, 3 and 4 circled, with a reason for leaving 2 uncircled. Support with a flashlight demonstration, pointing or adult scribing. Stretch: give both a book detail and an observation. People can enjoy a custom while using evidence for forecasts. Answers and acceptable responses: page 13.

Copyright 2026 Sheryl Dotson | Magsico Press
awonderingheartbooks.com

INDEPENDENT CHOICES | K-2

# More Optional Activities

*Can a Shadow Really Predict Spring?*

## Calendar Math | 20 minutes

**Goal:** Count six weeks from February 2. Revisit Ralph's sign on book page 10. **Prepare:** page 12 per child, pencils/crayons; display a calendar. **No-print:** count together on the display.

**Ask (3 min):** How many days are in a week?
**Revisit (2 min):** Read Ralph's sign. Does a saying set the weather?
**Explore (12 min):** Color February 2 and make six seven-day hops. Star the dates. Circle March 20, the 2027 Northern Hemisphere astronomical start of spring.
**Reflect (3 min):** A calendar season starts on a set date; local spring weather and signs vary. A groundhog's shadow controls neither.

**Look for:** six equal weekly hops to March 16. Count aloud together for support. **Optional Grade 3 stretch:** count four days from March 16 to March 20. Answers: page 13.

## Signs of Spring | 20 minutes

**Goal:** Describe a local observation and a question. Revisit book pages 24-25: watch the world change. **Prepare:** scrap paper and pencils; choose a safe supervised walk or window view. **No-print:** tell or act out an observation.

**Ask (3 min):** What changes might we notice over time?
**Revisit (2 min):** Read Gus' suggestion on page 25.
**Explore (12 min):** Observe, draw or describe what is there today. Buds, birds and melting snow are examples only where they occur; do not require a sign of spring to be present.
**Reflect (3 min):** Share one observation and one wonder. One visit does not establish a trend.

**Look for:** a specific observation distinguished from a guess. Offer pointing and scribing. Stretch: revisit the same location later and compare.

## Outdoor Shadows - Alternative Observation

Plan two supervised visits of about 10 minutes, several hours apart: once with the Sun lower and once higher. Mark the same standing spot and pose; record times and trace or measure on the same level surface. Compare afterward. Never look at the Sun. Clouds may hide the outline; postpone or use the indoor model. Shadows are generally shorter when the Sun is higher.

Copyright 2026 Sheryl Dotson | Magsico Press

STUDENT PAGE | OPTIONAL RETELLING

# Story Sequencing

*Can a Shadow Really Predict Spring?*

**Name:** _____ **Date:** _____

## What happened first? Write 1 to 6 in the circles.



○ Gus asks, "What's a shadow?"



○ Gus sleeps and dreams of spring.



○ Gus runs. His shadow follows!



○ Gus sees February 2 on his calendar.



○ Gus steps into sunshine. A shadow appears!



○ Gus groans: "It's THAT day already!"

Copyright 2026 Sheryl Dotson | Magsico Press

STUDENT PAGE | CORE LESSON SHEET

# Shadow Detectives

*Can a Shadow Really Predict Spring?*

**Name:** _____ **Date:** _____

**Keep the toy and paper still. Raise the light straight up.**

**I think the shadow will...**

**1. Flashlight low at the side**

**2. Flashlight higher above**

**Draw the light, toy and shadow in each box.**
**What changed? Tell, draw or write.**

Copyright 2026 Sheryl Dotson | Magsico Press

STUDENT PAGE | OPTIONAL RESPONSE

# What Did Gus Learn?

*Can a Shadow Really Predict Spring?*

**Name:** _____ **Date:** _____

## Draw Gus in sunlight. Show the light and his shadow.

## Circle each sentence that is true.

Grown-ups may read the sentences aloud.

1. A shadow forms when something blocks light.
2. A shadow tells us the exact day spring will arrive.
3. A shadow can change when the light moves.
4. Groundhog Day is a tradition.

## Tell a partner: What helped Gus change his mind?

Copyright 2026 Sheryl Dotson | Magsico Press

STUDENT PAGE | OPTIONAL CALENDAR MATH

# Groundhog Day Calendar

*Can a Shadow Really Predict Spring?*

**Name:** _____ **Date:** _____

**Ralph's sign says, "SIX MORE WEEKS OF WINTER!"**
**Let's count six weeks on a calendar.**

## February 2027

| Su | Mo | Tu | We | Th | Fr | Sa |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | | | | | | |

## March 2027

| Su | Mo | Tu | We | Th | Fr | Sa |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

**1. Color February 2. That is Groundhog Day!**

**2. What day of the week is it? _____**

**3. Make six one-week hops. Star each date.**
**You land on March _____.**

**4. Circle March 20: the 2027 Northern Hemisphere astronomical start of spring.**

**5. Talk: Does a shadow change when spring comes?**

**Optional Grade 3 stretch: How many days from March 16 to March 20? _____**

Copyright 2026 Sheryl Dotson | Magsico Press
awonderingheartbooks.com

TEACHER SUPPORT | ANSWERS

# Answer Guidance

***Can a Shadow Really Predict Spring?***

## Page 9 – Story Sequencing

Sleep/dream; calendar; "THAT day"; "What's a shadow?"; steps into sunshine; runs. Reading the cards left to right, top to bottom: **4, 1, 6, 2, 5, 3.** After sequencing, revisit the story's discovery and ending orally.

## Page 10 – Shadow Detectives

Predictions vary. Look for light, toy and shadow; the shadow falls away from the light. With the page 3 setup, the higher light makes a shorter shadow. Credit honest observations; troubleshoot unexpected results together.

## Page 11 – What Did Gus Learn?

True: **1, 3 and 4.** Statement 2 is false. Drawings should show a plausible light-Gus-shadow relationship; artistic skill is not assessed. Accept explanations such as: Gus tried things, noticed changes and listened to Rocky.

## Page 12 – Groundhog Day Calendar

February 2 is **Tuesday**. Star February **9, 16, 23** and March **2, 9, 16**. Six weeks ends on March **16**. Circle March 20. Optional stretch: **4 days**. A groundhog's shadow does not determine the astronomical season or local weather.

## Open responses and misconceptions

Accept observations supported by the story or investigation. Gus did not grow and shrink; his shadow changed. Groundhog Day is a tradition, while shadow formation has a scientific explanation. People can enjoy customs and use evidence for forecasts. Seasonal observations vary by location; a child may accurately report no visible spring changes.

Copyright 2026 Sheryl Dotson | Magsico Press
awonderingheartbooks.com

TEACHER SUPPORT | RESOURCES

# Sources & Permissions

***Can a Shadow Really Predict Spring?***

## Facts, tradition and story

A shadow forms where light is blocked. Its length depends on the light's direction and the setup. The six-more-weeks saying is Groundhog Day weather lore. Gus and his friends are fictional; real groundhogs hibernate. German-speaking communities brought European weather customs to Pennsylvania; Punxsutawney's newspaper noted Groundhog Day in 1886.

NOAA's February 2026 update rated Punxsutawney Phil at 35% for 2006-2025, using U.S. February-March temperature averages. That comparison does not establish an ability to predict local spring weather. March 20 is the 2027 Northern Hemisphere astronomical start of spring; local weather changes do not follow a single date.

## Skills practiced

Observation, explaining with evidence, comprehension, retelling, vocabulary, discussing customs and counting weeks. These are descriptive learning connections, not formal curriculum alignment or endorsement.

## Sources

UCAR - Sunshine and Shadows
scied.ucar.edu/activity/sunshine-shadows
National Weather Service - Ground Hog History
weather.gov/phi/GroundHogHistory
NOAA - Grading the groundhogs
noaa.gov/heritage/stories/grading-groundhogs
U.S. Naval Observatory - Earth's Seasons
aa.usno.navy.mil/data/Earth_Seasons

These organizations do not endorse this companion.

## Copy permission

Free for personal, family and classroom use. Teachers may photocopy companion sheets for their learners with the author, brand and publisher credit retained. This permission does not grant permission to reproduce the picture book.

This companion is a separate downloadable resource.

Copyright 2026 Sheryl Dotson | Magsico Press