Parent & Teaching Guide

This pack is for ages 6–10, with reading help as needed. Pick the activities that fit your day. Children can point, draw, talk, or have someone write down their words.

Choose a page to begin

Learner pp. 1–2 · Owl and listening

Read the picture first. For the listening game, bring a chair, a sheet of paper, a pencil, and a partner.

Learner pp. 3–4 · Lights and snowflake

Bring a pencil. Colored pencils are optional. The graph and drawing model are on the pages.

Learner pp. 5–6 · Ice and window

Bring one ice cube, a shallow dish, a timer or timekeeper, and a pencil. Leave the window page where you can find it for the return visit.

Learner pp. 7–9 · Story and puzzles

Write or tell the mystery. Try the picture hunt first for clues, or take a pencil through the winter maze.

Read the owl picture

Follow the sound

Have your learner point to the vole and trace the blue dots. The vole's movements make a rustle that can travel up through the snow.

Follow the owl

The copper arrow shows the same owl moving from its perch to hover. The close-up shows the feet-first plunge. Snow can make the sound seem to come from the wrong place, so listening directly above may help the owl find where to dive.

US Letter · 9 activity pages, a closing page, and 6 guide pages.

Use permissions and help links are on learner p. 10. Print just the pages you need.

Lead the listening activity

Before the first round

Have your learner sit facing one spot. Let them hear a gentle practice rustle first. From the learner's point of view, choose spots on their left, right and behind them, each about the same distance from the chair.

During the four rounds

Move to a spot before the learner says they're ready, so they're listening for the rustle. Use the same sheet of paper and one gentle rustle each time. Mix up the positions as you like. Let the learner guess or say "not sure" before you reveal where you stood. Have them mark their guess first and the revealed spot second.

What counts as an answer?

The "My partner was" column records where you actually stood, so it will vary. For the last question, accept any observation tied to a round. For example, "In round two it sounded louder on my left," or "In round four I could hear the rustle, but I couldn't tell which way it came from."

Connect it back to the owl

In both the activity and the hunt, a sound gives a clue about where something is. Your room doesn't reproduce the way snow changes a sound or the way an owl's ears work. Treat the notes as observations rather than a score.

Behind the owl story

Cornell Lab of Ornithology · Great Gray Owl Life History
Hunting from a perch, uneven ear openings and the feet-first plunge.

Clark, Duncan & Dougherty (2022) · Proceedings of the Royal Society B
How snow alters sound and why hovering may help. DOI 10.1098/rspb.2022.1164.

Cornell Lab of Ornithology · Living Bird
Background on the facial disc, quiet wings and hunting through snow crust.

Lights & Snowflakes

Winter Lights Graph · p. 3

Before counting

Let your learner make a quick guess from the string. A guess can change once there is a count to check.

Check the graph

There are 5 stars, 4 circles, and 3 diamonds, for 12 lights total. Shade 5, 4, and 3 boxes from the bottom in their matching columns. Stars appear most. Whether that matches the guess depends on what your learner circled.



If a count looks off

Have your learner point to each light from left to right. They can mark a tiny dot under each one they've counted.

Snowflake Geometry · p. 4

Check the pattern

A learner might add one short branch on either side of every arm. Look for the same marks in the same order and at about the same distance from the center. A different repeated design works too.

If they want the angle

Six equal angles make one full turn. Divide 360° by 6 to get 60° between neighboring spokes.

Connect the drawing to nature

The page models one branching snow crystal. Real crystals can grow in other forms, including plates and columns.

Source: NOAA · How do snowflakes form?

Ice & Window Watching

Ice Cube Time-Lapse · p. 5

Start the ice check

Set the dish in a steady place. Let your learner make a prediction, draw or describe the cube, and start the timer. Use the same dish and spot for each look.

Compare the observations

Your learner may notice softer edges, a puddle, or very little change. Record what actually happened, even if the ice is gone. Then return to the prediction. For example: "I thought it would be gone, but there was still some ice." A match or a difference gives you something to discuss.

If they wonder where it went

Point to the water in the dish. The solid ice melted into liquid water. How quickly it changes in one room can't tell us how fast every ice cube melts.

Winter Window Watch · p. 6

Choose a repeatable spot

A window, porch, or sheltered doorway works. Use the same view for both visits. Any weather is fine. If the first visit is all you do today, set the sheet aside for the return.

Compare one detail

"The same branch was still, then it moved in the wind" is a useful answer if that's what they saw. "The roof looked the same both times" is useful too. Ask what they noticed that led them to their answer.



The Lantern Mystery

The Lantern in the Snow · p. 7

Give your learner a moment to decide what happened, then help them choose two details the character can notice before the reveal. A mitten marked with Jo's initials and a half-built snow fort might point to Jo, who set down the lantern while looking for the missing mitten.

Any ending works if both clues appear before it and help the reveal make sense. A spoken story or a few drawn scenes can show the same idea.

Seek & Find · p. 8

The list matches the numbered rings. If your learner is stuck, name the part of the scene to look in before you show them the answer.



1 Paper star
Lower corner of the window

2 Mitten
Between the firewood logs

3 Little key
Hanging beside the gate hinge

4 Jingle bell
At the bottom of the door wreath

5 Ribbon bow
Tied around the dry grass

6 Pinecone
Beside the tree root

7 Thimble
On the left fence post

8 Acorn
On the lower step by a pebble

Use the picture hunt on its own or before writing the mystery.

Winter Trail Solution

The line shows the one route from the trailhead to the lantern. If your learner gets stuck, help them go back to the last fork and try another branch.

