

Snowman Logic – Teacher Directions & Instructional Guide

Overview

This activity is designed as a guided logic and reasoning task for primary students. It emphasizes thinking, explanation, and productive struggle rather than speed or artistic skill. The structure reflects nationally recommended gifted and advanced learning practices, including process-focused instruction, flexible pacing, and opportunities for students to revise their thinking.

Materials

- Snowman Logic student worksheet (1 per student)
- Pencil (for drawing light connecting lines)
- Crayons or colored pencils (specifically- Black, Blue, Red, Green, Brown, Purple, Orange)
- Optional: document camera or projector

Before You Begin

1. Distribute the worksheet and ask students to wait before coloring.
2. Explain that this is a thinking activity and that students may change their minds as they work.
3. Let students know it is okay to skip a clue and come back to it later.

Example teacher language:

“This activity is about thinking carefully and explaining ideas. We are going to listen, reason, and take our time. If something feels tricky, that’s okay.”

Snowman Review (Read Once)

Before reading the clues, review the snowmen so students are familiar with their features.

Example teacher language:

“Each snowman is different. One snowman wears a top hat and holds a broom. He does not wear a scarf. One snowman wears earmuffs, has a very long scarf, and wears mittens. One snowman wears a knit hat, has a short scarf, and holds a snowflake.”

Placement Clues

Read one clue at a time. After each clue, pause and allow students to think. Students may lightly draw a pencil line from the house to the snowman they believe belongs there. These lines can be erased or colored over later.

1. The snowman holding the broom lives in the house that is being snowed on.
2. The snowman wearing the long scarf lives in the house next to the tree on the left.
3. The snowman wearing the knit hat does not live in the snowy house.
4. The snowman wearing earmuffs does not live in the snowy house.

Color Clues (Confirmation)

Color clues are intended to confirm student thinking, not determine placement. Read one color clue at a time and allow students to color the specific detail before moving on.

5. The snowman holding the broom wears a black top hat.
6. The snowman wearing earmuffs has a long blue scarf.
7. The snowman wearing the knit hat wears a red hat.

House Color Extension

These clues extend the activity without adding new logic demands. Read one at a time and allow students to color after each clue.

8. The door on the snowy house is green.
9. The house next to the tree on the left has a blue door.
10. The middle house has a red roof.
11. The chimney on the snowy house is purple.
12. The chimney on the house next to the tree on the left is orange.

Creative Extension (Final Step)

Once all clues are complete, invite students to add one new detail to the picture. Students may add something to a house, the yard, or a snowman.

13. Add one new detail to a house, the yard, or a snowman.

Examples:

Add something to a house (wreath, flag, window shape, mailbox, etc.)

Add something to the yard (bird, snowman pet, sled, snow pile, etc.)

Add something to a snowman (decorative buttons, eyelashes, name tag, etc.)

14. Optional reflection prompt:

“I added this because _____.”

Extension Activities (Back of the Page)

Level 1: Draw & Tell: Add something to the picture (bird, snowman pet, star).

Finish the sentence: "I know this snowman lives here because ____."

Level 2: Explain Thinking: Students may draw, write, or dictate.

Answer one:

Which clue helped you the most?

Which clue was tricky?

What did you do when you weren't sure?

Level 3: Create a Clue: Make one new clue that would still be true.

Sentence starters: "The snowman with the ____ lives ____."

"The house next to the tree ____."

Optional Wrap-Up

After all clues and the creative extension are complete, teachers may allow students to finish coloring the rest of the page. This provides a calm wrap-up and gives students time to personalize their work without impacting the logic or reasoning components of the activity.

Instructional Notes

Teachers are encouraged to prompt students with questions rather than answers, supporting reasoning and explanation. Completion is less important than the thinking process.

Suggestions for Prompting Questions (For Struggling Students)

- "What do we know for sure?"
- "Which house has snow on it?"
- "Who cannot live in the snowy house?"
- "Point to the tree. Which house is next to it on the left?"
- "If this snowman can't live here, where could it live?"
- "Can we color yet, or should we wait?"

Instructional Rationale (National Context)

This lesson aligns with NAGC-supported practices by:

-emphasizing reasoning, explanation, and metacognition

- providing multiple entry points for diverse learners
- allowing revision of thinking as new information is introduced
- valuing depth of understanding over speed or completion

The structure supports identification and development of early advanced reasoning behaviors in primary students, even when reading and writing skills are still emerging.

Snowman Logic Answer Key Summary

Snowman 1: Top Hat & Broom Snowman

Lives in: Right house (the house being snowed on)

Snowman details:

Top hat: Black

Holding: Broom

Scarf: None

House details:

Door: Green

Chimney: Purple

Roof: (no assigned color)

Snowman 2: Earmuffs & Long Scarf Snowman

Lives in: Left house (next to the tree on the left)

Snowman details:

Wearing: Earmuffs

Scarf: Very long scarf, colored Blue

Wearing: Mittens

House details:

Door: Blue

Chimney: Orange

Roof: (no assigned color)

Snowman 3: Knit Hat & Snowflake Snowman

Lives in: Middle house

Snowman details:

Hat: Knit hat, colored Red

Scarf: Short scarf

Holding: Snowflake

House details:

Roof: Red

Door: (no assigned color)

Chimney: (no assigned color)

Shared Visual Details

Tree trunk: Brown

Tree location: Between the left and middle houses