The Science of Christmas & Winter

Parent Quick-Prep Supplies Checklist

Gather these supplies before you start. A grown-up should help with all three experiments. Use comfortably warm tap water and keep a towel handy.

- [ ] Two matching clear cups
- [ ] One bowl
- [ ] Two similar dry open untreated pinecones
- [ ] Two same-size ice cubes
- [ ] Two matching plates
- [ ] ¼ tsp table salt and a measuring spoon
- [ ] Two matching mini candy canes
- [ ] Cool and comfortably warm tap water
- [ ] A clock
- [ ] A pencil
- [ ] A towel

Repeat-Test Log

Repeat each test the same way. Write or draw what happened each time.

The Pinecone Weather Watcher

Try	Dry pinecone	Wet pinecone
Try 1		
Try 2		

The Ice-Cube Salt Race

Try	Ice cube with salt	Plain ice cube
Try 1		
Try 2		

The Disappearing Candy Cane

Try	Candy cane in cool water	Candy cane in warm water
Try 1		
Try 2		

BADGE TRAIL

Your Winter Wonder Lab

Color the empty circle for each unit you finish. Then step back and look at your trail!



Big Spotter bonus (ages 7 to 9) **Spot it!** Find the hidden things **Be Ready** Safe habits for happy scientists

On every Badge Check page there is a Winter Log. Circle your favorite thing from that unit.

The Science of Christmas & Winter

8 Printable Science Badges

Color each badge and cut around the dotted circle.
Add the badges to your Winter Wonder Lab Badge Trail as you go.



Reindeer



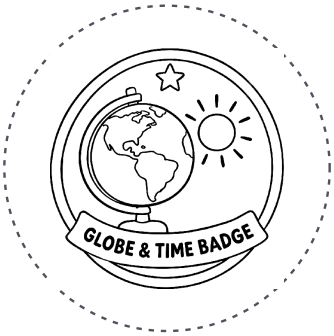
Evergreen



Snowflake



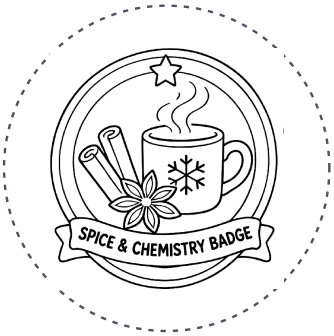
Starlight



Globe & Time



Winter Wildlife



Spice & Chemistry



Winter Lab

My Winter Experiment Table & Graph

Pair this sheet with page 75. Plan a safe winter experiment with a grown-up, record what you notice, and make a bar graph of your results.

My Question: _____

My observations

Trial or time	What I measured	What I noticed

My bar graph

Title: _____

Side label & units: _____

Bottom labels: _____

WITH A GROWN-UP



Our Family Science Plan



Plan a winter science adventure with a grown-up. Fill in the boxes together.

1. Our favorite winter thing to observe is _____

2. Something we could predict and test together is _____

3. A winter animal we would like to watch is _____

4. A safety rule we will follow is _____

5. A star or a pattern we want to find in the sky is _____

6. A question we still want to answer is _____

Draw the winter science moment you want to try.

We practiced

- ☐ We tried one TRY IT together.
- ☐ We looked for a star or a track.
- ☐ We wrote down a prediction.

Every question is a good science question!





The Mini Minds Lab

Winter Scientist Certificate

This certificate is proudly given to

_____

for exploring the science of winter and Christmas!

You met real reindeer, snowflakes, evergreens, stars and time zones, tried safe experiments, solved puzzles, and became a curious, careful Winter Scientist.





You did it, Winter Scientist!



Signed: Juniper and Biscuit

Date: _____

Grown-up: _____