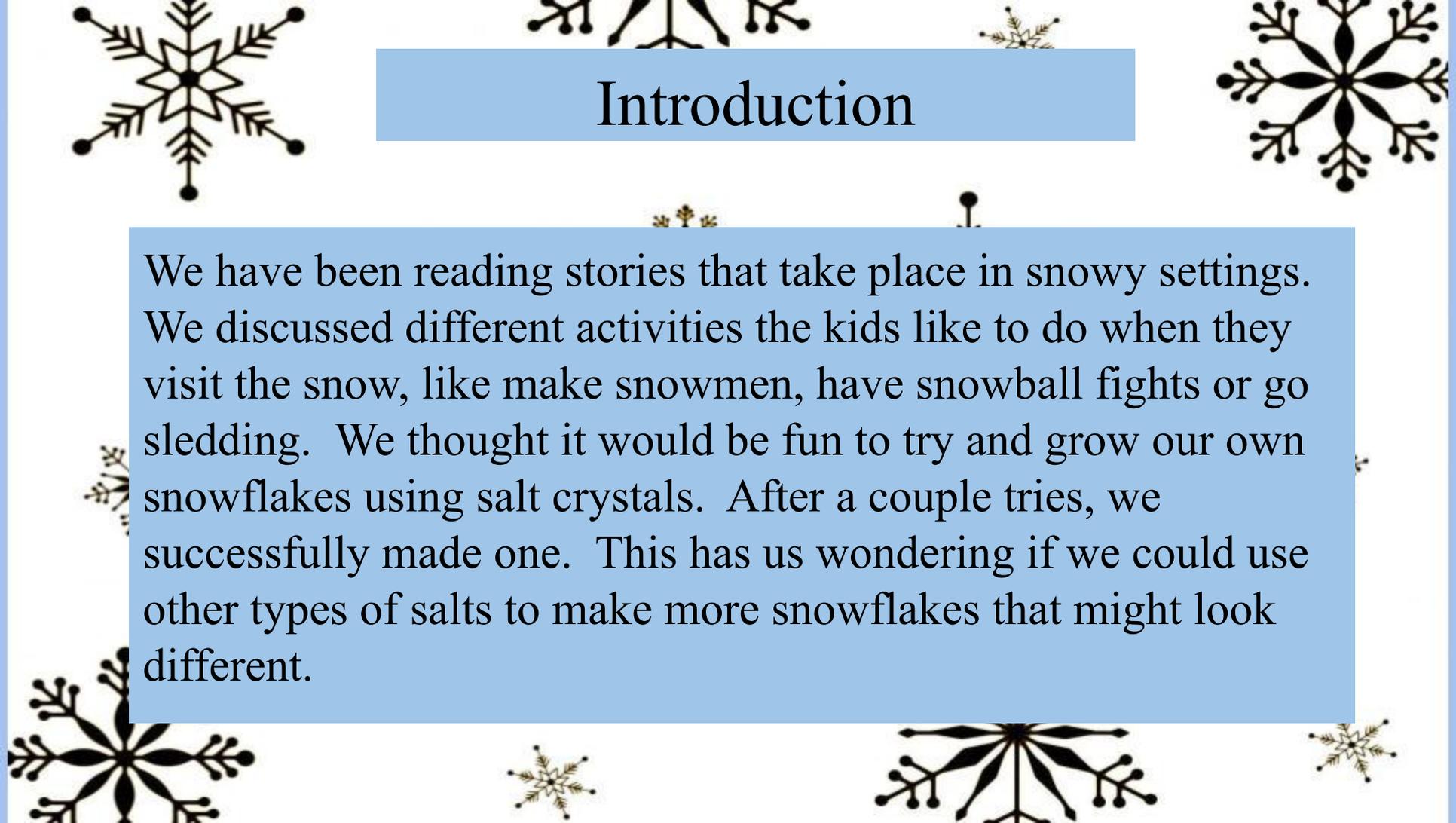




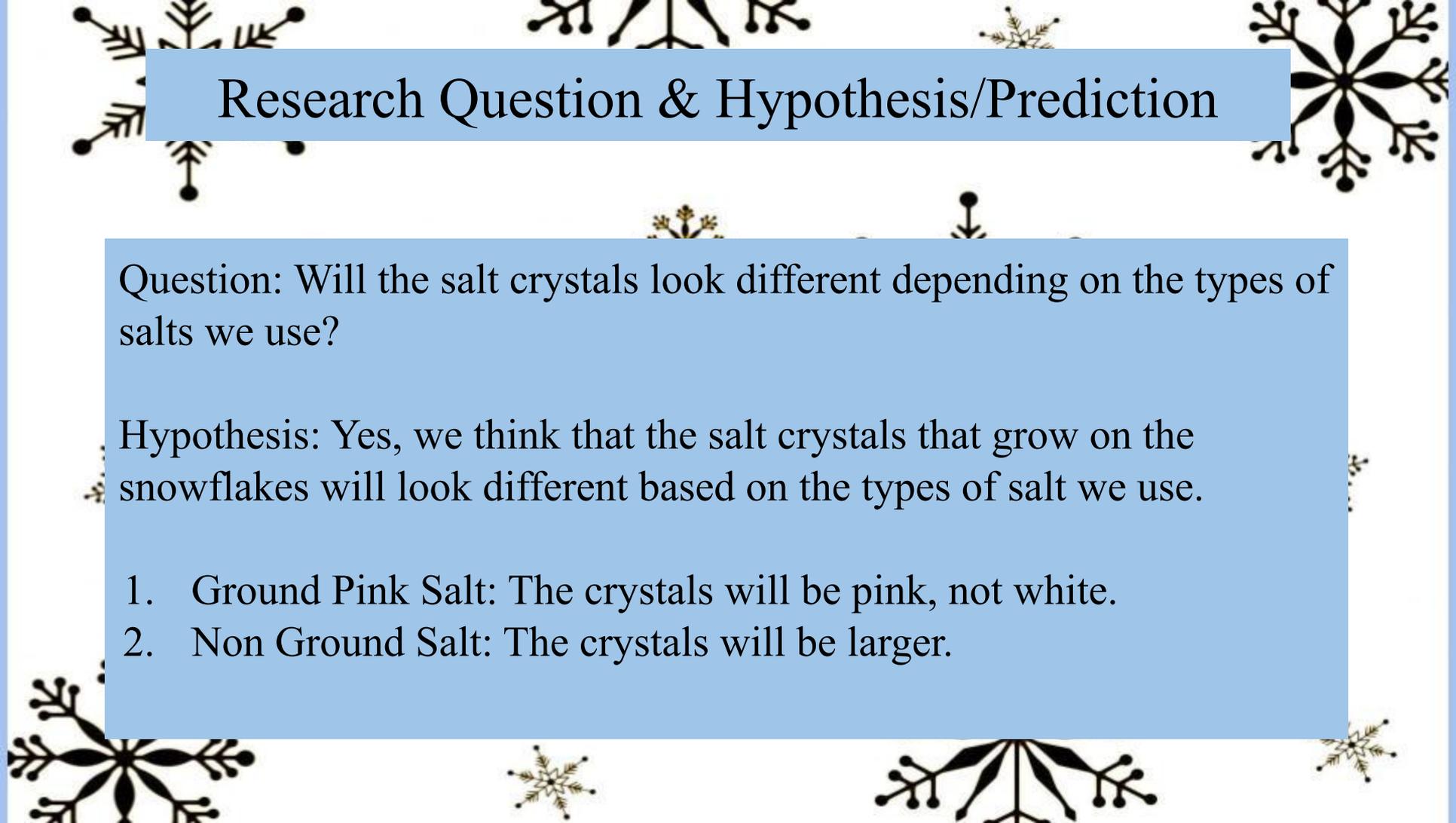
Snowflake Fun

Chemical Science
1CH002



Introduction

We have been reading stories that take place in snowy settings. We discussed different activities the kids like to do when they visit the snow, like make snowmen, have snowball fights or go sledding. We thought it would be fun to try and grow our own snowflakes using salt crystals. After a couple tries, we successfully made one. This has us wondering if we could use other types of salts to make more snowflakes that might look different.



Research Question & Hypothesis/Prediction

Question: Will the salt crystals look different depending on the types of salts we use?

Hypothesis: Yes, we think that the salt crystals that grow on the snowflakes will look different based on the types of salt we use.

1. Ground Pink Salt: The crystals will be pink, not white.
2. Non Ground Salt: The crystals will be larger.

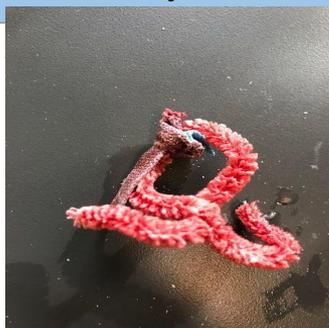
Procedures

1. Boil 2 cups water
2. Pour in $\frac{1}{2}$ cup salt and stir until it dissolves
3. Use a pipe cleaner and fold into a snowflake shape.
4. Attach to a stick using string
5. Submerge the pipe cleaner into the salt water and let sit for 2 days.
6. Pull it out and let sit for 1 day.
7. Repeat with other salt types.



Results

	Ground White Table Salt	Ground Pink Salt	Whole Pink Salts
Looked Like	<ul style="list-style-type: none">- Salt grabbed onto each other and made bigger pieces- Crumbled when we touched it	<ul style="list-style-type: none">- Slightly pink- Did not see large clumps- Not much attached to the pipecleaner	<ul style="list-style-type: none">- More white colored than pink- Salt crystals formed, but was more flakey
Felt Like	<ul style="list-style-type: none">- Hard like a rock	<ul style="list-style-type: none">- Hardened- Grainy	<ul style="list-style-type: none">- Hard like a rock- Fragile



Conclusion

- We determined that it is important to make sure that enough of the salts dissolve in the hot water. When the pink salt did not dissolve enough, there was less crystallization.
- The pink salts did not make the snowflake salt crystals more pink.
- The salt crystals connected together when the water evaporated leaving the salt crystals that look like snow.

Questions

- When the salt dissolved in the hot water, did the pink pigments dissolve too?
- What makes the salt stick together?
- What would happen if we left the pipe cleaner in the water longer?
- What would happen if we used more salt?