

MAKE MAGIC SNOW



4 cups of frozen baking powder

1-2 cups of cold water (added slowly)

You will also need:

Vinegar

Squirt bottles

A large bowl or container

Optional additions:

Glitter

Peppermint extract (for a wintry scent)

Snowman parts

Method

Begin by pouring 4 cups of frozen baking powder into a large bowl or container.

Freezing the baking powder isn't necessary, but it makes the "snow" extra icy & cold.

Slowly begin to add cold water and mix, slowly adding more water and mixing until the desired consistency is reached.

As you mix the water into the baking powder the most amazing mold-able snow will form!

Wow kids of all ages and make snow that erupts! "cool" science meets winter fun with this simple activity! #magicsnow #magicsnowrecipe #eruptingsnowballs #eruptingsnow #snowrecipesforkids #snowrecipe #snow #bakingpowdersnow #growingajeweledrose #activitiesforkids

This play snow is super soft, yet mold-able. It makes the best snowballs!

It is also icy-cold, which my kids thought was "the coolest" thing!

PLAYING WITH MAGIC SNOW

Add snowman parts so that the kids can build snowmen.

Add cars and trucks for a quick-shift sensory bin.

Let students mark make.

MAKE A SNOWSTORM



Materials

A plastic bottle

Baby oil/ cooking oil

White paint

Water

Iridescent glitter

Alka Seltzer

Blue food colouring (optional)

Method

Begin by filling the jar that you are using 3/4 of the way with baby oil.

Briefly set this to the side.

Making the "Snow," combine one teaspoon of white paint with one cup of very warm water, stir until the paint is dissolved.

Once mixed pour the "white water" into the jar, leaving a touch of room at the top, add glitter and food colouring if desired. Then, wait for the glitter and water to settle at the bottom of the jar.

Making the Snowstorm

Take an Alka-Seltzer tablet and break it into pieces, drop the pieces into the jar and watch what happens....

The water will immediately begin to swirl and bubble in the oil, creating a dancing snowstorm!

Each time the storm settled add more Alka-Seltzer so that they could watch it again!

Ice Science: Lifting an Ice Cube Using Salt and a String

Drop an ice cube in a glass of ice water. Try to pick the ice cube up without your fingers by simply placing the string on it and pulling up. Impossible, right?

Now, dip the string in water, lay it across the ice cube and sprinkle a generous amount of salt over the string/ice cube. Wait about a minute and try again to lift the cube using only the string. What happens?

Salt lowers the temperature at which ice can melt and water can freeze. Usually, ice melts and water freezes at 32 degrees Fahrenheit, but if you add salt to it, ice will melt at a lower (colder) temperature.

The salt helps the ice surrounding the string start to melt, and it takes heat from the surrounding water, which then re-freezes around the string.

Different chemicals change the freezing point of water differently. Salt can thaw ice at 15 degrees F, but at 0 degrees F, it won't do anything. Other de-icing chemicals they add to roads can work at much colder temperatures (down to 20 degrees below zero.) If it's cold enough, even chemicals won't melt the ice.



Dissolve Candy canes

Test how candy canes dissolve in different liquids like Science Sparks did. Besides water, what else would you use? Try vinegar, milk, fruit juice, oil, etc. Does the type of liquid make a difference in how the candy canes dissolve?



Dancing Candy Canes

You'll need:

- baking soda
- vinegar
- water
- bowl
- spoon
- crushed candy canes

Mix baking soda and vinegar together in a bowl. Add your candy cane pieces and watch them dance around. You need the right amount of bubbles produced by the reaction to make the candy dance without floating to the top.

Fill a bowl with half vinegar and half water. Drop in crushed candy cane pieces. Then, add less than a 1/2 tablespoon of baking soda to the bowl. We had to wait for the bubbles to die down a bit before we saw the candy canes move around.



Play with the amounts of baking soda and vinegar until you get the right amount of bubbles. You can see the candy cane starting to lift up at the bottom. And then rising to the top.

Create a Christmas winter scene using

Materials

Shaving Cream

White school glue

Peppermint extract

Iridescent glitter or buffalo snow

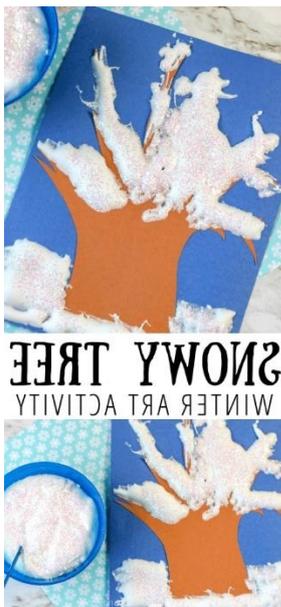
First Steps

Begin by popping the glue into the refrigerator. We left ours there overnight and then made our paint the next morning.

We left our glue out on the counter for about ten minutes just to get it flowing before we made our paint.

Making Snow Paint

Begin by combining roughly equal parts of chilled glue and shaving cream in a bowl, sprinkle in glitter & buffalo snow if desired. You can also add a few drops of peppermint extract for a wintry scent, finish the paint off with more glitter.



TYPES OF EVERGREEN TREES

Explore the different types of evergreen trees in your garden and neighbourhood.

1. Take a walk in your neighbourhood, park, garden, or local park.
2. Gather a variety of evergreen leaves. Always ask permission if the trees are not yours.
3. Explore/smell the differences and similarities in the leaves.
4. Paint with them, print with them.

How many different varieties can you find?



How many Christmas smells?

Here are some ideas!

How many various Christmas scents can you find?

vanilla extract

almond extract {smells like Christmas sugar cookies with royal icing}

cherry extract

orange extract {or orange peel or juice}

cocoa

ginger

cloves

peppermint {dissolve candy cane in water or use peppermint extract.}



How to Make Magic Milk

Magic Milk Materials

2% or whole milk

food colouring- maybe use Christmas colours.

dishwashing liquid

cotton swab

plate

Magic Milk Instructions

Pour enough milk onto a plate to cover the bottom.

Drop food colouring into the milk.

Dip a cotton swab in dishwashing detergent liquid.

Touch the coated swab to the milk in the centre of the plate.

Don't stir the milk; it isn't necessary. The colours will swirl on their own as soon as the detergent contacts the liquid.



Create a Christmas song!

Use a traditional Christmas song, change some of the words Science related and sing away!

You may not want to change as many words but here are some ideas:

The Chemistry Teacher's Coming to Town

(Santa Claus is Coming to Town)

You better not weigh

You better not heat

You better not react

I'm telling you now

The Chemistry Teacher's coming to town

He's collecting data

He's checking it twice

He's gonna find out

The heat of melting ice

The Chemistry Teacher's coming to town

He sees you when you're decanting

He knows when you titrate

He knows when you are safe or not

So wear goggles for goodness sake

Oh, you better not filter

And drink your filtrate

You better not be careless and spill your precipitate

The Chemistry Teacher's coming to town

I'm Dreaming of a White Precipitate

(I'm Dreaming of a White Christmas)

I'm dreaming of a white precipitate
just like the ones I used to make
Where the colors are vivid and
the chemist is livid
to see impurities in the snow.

I'm dreaming of a white precipitate
with every chemistry test I write
May your equations be balanced and right
and may all your reactions be bright.

Silent Labs

(Silent Night)

Silent labs, difficult labs
All with math, all with graphs
Observations of colours and smells
Calculations and graph curves like bells
Memories of tests that have past
Oh, how long will chemistry last?

Silent labs, difficult labs
All with math, all with graphs
Lots of equations that need balancing
Gas pressure problems that make my head ring

(The Twelve Days of Christmas)

On the first day of chemistry

My teacher gave to me

A candle from Chem Study.

(second day) two asbestos pads

(third day) three little beakers

(fourth day) four work sheets

(fifth day) five golden moles

(sixth day) six flaming test tubes

(seventh day) seven unknown samples

(eighth day) eight homework problems

(ninth day) nine grams of salt

(tenth day) a ten page test

(eleventh day) eleven molecules

(twelfth day) a twelve point quiz

We Wish You a Happy Halogen

(We Wish you a Merry Christmas)

We wish you a happy halogen

We wish you a happy halogen

We wish you a happy halogen

To react with a metal.

Good acid we bring
to you and your base.
We wish you a merry molecule
and a happy halogen.

Lab Reports

(Jingle Bells)

Dashing through the lab
with a tan page lab report
Taking all those tests
and laughing at them all
Bells for fire drills ring
making spirits bright
What fun it is to laugh and sing
a chemistry song tonight.

Oh, lab report, lab reports,
reacting all the way
Oh what fun it is to study
for a chemistry test today, Hey!

Chemistry test, chemistry test
isn't it a blast
Oh what fun it is to take
a chemistry test and pass.

Explore the Christmas decs

Put a selection of Christmas ornaments in a box or bag

Shake the container and Sing!

What's in the box/bag

What's in the box/bag

Reach out and touch it

What's in the box/bag.

Let the students find an item to explore,

Do they like how it feels?

Roll it on their bodies

Does it smell?

Make a list of likes and dislikes



Christmas Science: Baking Soda, Vinegar, and Cookie Cutters

Here's what you'll need:

baking soda

vinegar

food colouring

a large pan/dish to contain the play

containers for the coloured vinegar

a dropper/pipette {or even just spoons}

Christmas themed cookie cutters



Place cookie cutters in your large pan/dish.

Fill the cookie cutters with baking soda.

Pour vinegar in containers and add food colouring. {We used red and green for Christmas colours.}

Place the coloured vinegar containers alongside a dropper or spoon.

Add drops of vinegar to the baking soda filled cookie cutters. Observe the bubbles. Explore colour mixing.

Instead of placing the food colouring in the vinegar, you could place drops of food colouring under the baking soda. When vinegar is added to the baking soda, they will get a colour surprise.