

THE GREAT SNOWBALL SOAP ADVENTURE !!

It rarely snows in Greece, where the Kourabiedes cookies are from, but the cookies themselves look just like snowballs, so why not make some snowballs you can play with in any weather! (Snowball fights not recommended...except maybe in the bathtub!)

This snowball adventure has three parts: you will "blow up" a bar of Ivory soap in the microwave to create an amazingly cool cloud. Next you will be able to play with that giant cloud and create your own squishy dough to mold into shapes. Finally, you will make "snowballs"

of the soap dough which will look just like kourabiedes cookies—but don't eat them! These soap snowballs can be given as gifts or used as soap at home!

PART I: EXPLODING SCIENCE!

You will need:

- One bar of Ivory soap (it must be Ivory brand!)
- One pie plate or glass bowl
- A microwave oven
- Optional: Knife to cut the soap if desired

*Children should have supervision when using a knife or a microwave



Step One:

Cut partway through the soap and break it into four pieces, then scatter them around the plate. This is technically optional, but you will get a bigger result in less time this way.

Observe and Predict:

Can you see the bubbles in the soap where you broke it? If you have access to a kitchen scale, weigh the soap before you cut it. What do you think will happen when you heat it up?



Step Two:

Put the dish into the microwave and heat it on high for about two minutes. Watch closely for the magic to happen! You can stop at any time, but if you go for more than about two minutes, the soap will stop growing.

Observe and Predict:

How long did it take before the soap started to change shape? How long before it stopped? What did it look like?



Step Three:

Take the plate out of the microwave and let it cool for a minute. It may deflate a little as the hot air escapes.

Observe and Predict:

What does the soap smell like? Does it change in shape as it cools? What do you think it will feel like? Soft? Spiky? Solid?



Step Four:

Pick it up! Is it heavy? What does it feel like? Can you break it with your hands?

Observe and predict:

Does the soap feel like you thought it would? Is it easy to break apart? If you have access to a kitchen scale, weigh the piece and compare to the original weight.



Why did this happen?

Ivory soap is unlike most traditional types of soap because it is whipped for a long time to put air into it. In fact, the invention of this soap was actually a "happy accident" when the mixer was left on too long at the factory! This is why Ivory soap floats when most other brands do not. When you put the soap in the microwave, the water and air in the soap heat up and expand, causing it to puff up. (This effect is called Charles' Law). It is a bit like what happens when you make popcorn!

PART II: THE SENSORY EXPERTENCE

Ok, so we have a giant cotton candy puff of soap...but what can we do with it? It is still the same soap, just in a different form. You can stop right here and use the chunks of soap like you normally would.

OR....you can make some super squishy soap dough!

You will need:

- The exploded soap from Part I
- A cheese grater (optional)
- Shaving cream (white, e.g. Barbasol)
- Medium size mixing bowl



Step One:

Break up all the soap into very small pieces. You can use a cheese grater, or just tear it up with your fingers.

Engage your creativity:

LOOK at the soap flakes: what does this remind you of? Snow? Confetti? Grated cheese? FEEL the pieces: how does the soap feel in your fingers? SMELL the soap



Step Two:

Add some shaving cream until you get to a consistency you like-- an apple sized amount works well, but a little more or less doesn't matter as long as it sticks together.

Engage your creativity:

Have you ever made homemade play-doh before? Slime? Mudpies? How are they different?Do you like getting your hands messy?



Step Three:

Have fun! Squish it, mold it, feel the slippery soap glide through your fingers!

Engage your creativity:

Make a snowball! Now...can you make a square? A cone? A pyramid? A heart?



PART II: THE SNOWBALL SOAP CRAFT

And now what? You have a bowl full of fluffy soapy dough...what do you do with it? Again it is STILL fully functional soap, so take a handful into the shower if you want!

OR...make snowballs!

You will need:

- Soap dough from the previous activity
- A small (golf ball sized) ice cream scoop or a soup spoon.
- Scented essential oil (optional—I used clove oil in one batch to echo the cloves sometimes put in the top of each cookie in Greece or rose oil to echo the rosewater usually sprinkled on the cookies! But you can also leave them plain—they still smell wonderfully clean and fresh!)



Step One:

Using a small ice cream scoop, scoop up a small ball full of the soap dough. If you don't have a scoop the right size, you can use a spoon and roll the dough into a ball with your hands.



Step Two:

Allow the soap balls to dry for at least 24 hours before packaging. To make them look more like kourabiedes cookies, save out a little bit of the grated soap (or grate a bit of a new bar) and dust on top like powdered sugar!

Note: For the batch on the left, I added a bit of cinnamon to the dough both for scent and color-- the ones on the right I just added a little cinnamon to the soap flakes before dusting the balls.



Step Three:

Packaging and gift giving! These soap balls make great gifts.