

# The Big Fog Effect

## Kit List

- ✓ Ice Scoop
- ✓ Red Lid Bucket
- ✓ Kettle
- ✓ Gloves
- ✓ Dry Ice

## Time

5 minutes

## Activity



**Best in the** kitchen and on the floor!

**Fill a kettle** to the maximum and switch on to boil. Ensure the kettle sits for 3-5 minutes after boiling before using.

**Seat the children** to watch this demo.

**Open the door** and also a window to provide plenty of fresh air and banish all pets.

**Children to promise** to keep 1 metre away from the bucket whilst the fog is activated.

**Place a towel** on the floor. The towel will soak up any moisture that might be created.

**Place the red** lid bucket securely on the towel.

**Pour 2 full** scoops of ice into the bucket through the holes in the red lid. Then pour the contents of the kettle through the same hole.

**The fog will** hide your hand, but you need to empty the entire kettle. Consider using a funnel.

**When the fog** has subsided you will be left with warm water, which is safe to pour down the sink.

## Note:



Always replace lid on dry ice box straight after use



## What's Happening?



When the dry ice and hot water mix, the result is "fog", lots of tiny drops of water in a cloud. The fog you have created is the same as the fog seen in nature.

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# Children's

## Birthday Pack

Perfect for  
Birthdays  
Parties  
Celebrations  
Kids

**Fun Activities**

**Cool Experiments**

**Awesome Effects**

**Kit Included**



# Pack Contents

## Contents

- ✓ Dry Ice Pack
- ✓ Gloves
- ✓ Red Lid Bucket
- ✓ Ice Scoop
- ✓ Red Plug
- ✓ Ice Cage
- ✓ Ice Cage Funnel
- ✓ Bubble Solution



Dry ice



Gloves



Red Lid Bucket



Bubble Solution



Ice Scoop



Red Plug



Ice Cage



Ice Cage Funnel

## Dry Ice Safety

Dry ice is extremely cold. Please follow the dry ice guidelines which are contained with our instruction booklet and are found on-line at [www.chillistick.com/downloads](http://www.chillistick.com/downloads).

Adult supervision is required at all times. If you have any queries or further questions please do call 020 3432 9412 or email [info@chillistick.com](mailto:info@chillistick.com).



# Bubble Monster

## Kit List

- ✓ Ice Scoop
- ✓ Red Lid Bucket
- ✓ Bubble Solution
- ✓ Gloves
- ✓ Dry Ice
- ✓ Hot Tap Water
- ✓ Tea Towel

## Time

5 minutes

## Note:



Always replace lid on dry ice box straight after use

## Activity



**This activity is messy** so use your kitchen sink!

**Open a window** and a door to allow for plenty of fresh air.

**Fill your kettle** with water and put on to boil.

**Place the bucket** in the kitchen sink and ensure the red lid is fastened to the bucket.

**Pour 1 full** scoop of dry ice into the bucket and add a few squirts of bubble mixture (the more you add the greater the bubbles!).

**Add a full** kettle of hot water (about the temperature of a cup of tea - not boiling water!) into the bucket and see the bubbles rise.

**Pop the bubbles!** It's cool and quite addictive.

## What's Happening?



The hot water and dry ice is creating lots of fog. This gas and water mixture inflates the bubble mixture creating a foamy bubble structure. The dry ice is changing from solid to gas



Super fun and really messy. So please do this on a surface that is easy to wipe clean. Same as the big fog activity BUT with added bubble solution. Pop and fog the bubbles - the more bubbles the more mess!

# The Volcano Cake



## Kit List

- ✓ 8" Cake Tin
- ✓ Pyrex Jug
- ✓ Cake Board
- ✓ Knife
- ✓ Ice Cage
- ✓ Ice Scoop
- ✓ Ingredients\*
- ✓ Gloves
- ✓ Dry Ice

## Note:



\*Full recipe ingredients available at [www.chillistick.com/downloads](http://www.chillistick.com/downloads)

Always replace lid on dry ice box straight after use

## What's Happening?



When the water hits the ice cage you will see lots of fog coming out of the cake

## Activity



This activity takes as much time as you need.

Use any cake design you like - we've chosen the Volcano cake. The idea is to hide the scoop inside the cake and put the ice cage in at the table when ready!

Bake 3 sponge cakes in 8" cake tins.

Slice the top of each sponge and the bottom of the base sponge so the surfaces are flat.



Create a 3 tier sponge cake. each layer has a filling spread on top.

Cut out a hole in the middle of the cake and smooth the edges with a serrated knife.

Transfer to a cake board and decorate



with your frosting and accessories.

## Party Time

Fill the ice cage using the loader with dry ice. Following the instructions supplied

Place the ice in the cup already hidden in your cake.

Take the cake to the table and pour no more than 150ml of hot water (about the temperature of a cup of tea) into the cup. Immediately you will see lots of fog coming out of the hidden cup bringing your cake to life!



Try melted jelly cubes in hot water to create bubbling lava. Remember only to fill the ice cage when ready to serve and always use hot water!

# The Safe Explosion

## Kit List

- ✓ Ice Scoop
- ✓ Red Plug
- ✓ Gloves
- ✓ Dry Ice

## Time

5 minutes



### Note:

Always replace lid on dry ice box straight after use

## Activity



**Place the ice** scoop on a table/work surface.

**Ensure everyone is** sitting back from the experiment so that the lid is away from your face.

**Place 3-4** pellets of dry ice into the ice scoop. The easiest way to do this is to scoop the ice directly from the ice box. If you want to place the pieces in by hand please wear lightweight gloves.

**Push the red** plug firmly on the scoop and wait.

**After about 20** seconds the red cap will pop off.

**Do you want** more? Place 2-3 pellets of dry ice in a plastic zip log freezer bag. Seal the bag and place it in the sink and wait. This will make quite a loud bang but is great fun!

## What's Happening?



The warm air in the room is causing the dry ice to turn to a gas. Gases need more room than solids and liquids so the pressure grows in the Scoop. This will eventually push the cap off.



Don't be put off by the title! This is very safe and will get a round of applause.....

You will blow the red plug out of the ice scoop. The red cap will fly up a metre or so in the air with a nice popping sound.



# Floating Bubbles

## Kit List

- ✓ Ice Scoop
- ✓ Red Lid Bucket
- ✓ Tea Towel
- ✓ Gloves
- ✓ Dry Ice

## Time

10 minutes

## Note:

Always replace lid on dry ice box straight after use

## Activity



Place the **bucket** in the sink.

**Fill the ice** scoop to around a quarter full.

**Cover the bucket** with a tea towel and wait 5 minutes.

**Tell the children** to be very quiet and still - this is a magic bucket.

**Gently remove the** towel from the bucket.

**Invite the children** to blow bubbles into the bucket - watch as the bubbles bob and float in the bucket.



## What's Happening?

The dry ice is solid carbon dioxide. (The stuff that makes drinks fizzy). At room temperature it wants to turn into a gas. This gas slowly fills the bucket pushing out air.

Carbon dioxide is heavier than air so it tends to stay in the sink. Unless it is pushed out by an open window. This is why we suggest using a tea towel to keep the gas in the bucket.



Simple and fun experiment that shows you just how magical things can be ..... Well almost!

If the bubbles don't float try using a cup of hot water to make fog which will encourage the carbon dioxide in the sink.

# Foggy Drinks

## Kit List

- ✓ Pitcher Jug
- ✓ Ice Cage
- ✓ Ice Cage Funnel
- ✓ Drinking cups
- ✓ Fruit Cordial
- ✓ Water
- ✓ Gloves
- ✓ Dry Ice

## Time

5 minutes

### Note:



Always replace lid on dry ice box straight after

## Activity



Ensure the ice cage and jug is freshly washed.

### Place the funnel

into the safety valve of the ice cage and scoop dry ice into the cage using the funnel until half full. (Pic 1).

### Remove the funnel

from the ice cage. (Pic 2).

**Make a jug** of your chosen drink and drop the ice cage into the jug.

**A fog will** be created which will carry the aroma of the drink - ask the children to smell the drink!



Pic 1



Pic 2

**Whilst fogging pour** into a glass so each child has fog in their drink. There is plenty of ice in the pack so when it's done - refill the ice cage!



## What's Happening?



The dry ice contained in the ice cage and drink mixture create a fog of tiny droplets of the drink. This is why the aroma of the drink is easy to detect - you have created a fruit flavoured cloud! The dry ice converts from a solid directly to a gas and this is the only way it can leave the ice cage.