

# Parent Guide

## How can I use this with my children?

These fun science experiments are a great addition to any science topic or fun ideas for a party!

## How does this help my children's learning?

These science activities will help your child to problem solve, communicate with others and have an awareness of the world around them.

## Ideas for further learning:

Why not try some other experiments to do at home in this [Science Experiments to Do at Home Pack?](#)



# Science Experiments at Home

## Weather Jars - Tornado in a Jar

### Equipment:

empty, clean clear jar with a lid  
jug of water  
1 teaspoon of washing up liquid  
1 teaspoon of vinegar  
glitter or small objects for the jar (optional)

### Instructions:

1.  $\frac{3}{4}$  fill the jar with water, leaving about 3cm gap at the top for movement.
2. Pour in the washing up liquid and vinegar.
3. Fasten the lid of the jar on securely.
4. Swirl the jar for a few seconds to get the tornado going.
5. Place the jar onto a table and watch the tornado move.



twinkl.com

## Weather Jars - Rain Cloud Jar

### Equipment:

empty, clean clear jar  
water  
shaving foam  
food colouring

### Instructions:

1. Fill the jar almost to the top with water.
2. Cover the top with a 'cloud' of shaving cream.
3. Pour a few drops of blue food colouring through the shaving foam.
4. The foam will 'rain' once it can't hold onto the colouring anymore - a little like rain cloud formation.



twinkl.com

### Disclaimer:

We hope the information on our website and resource is useful. However, some ingredients and/or materials used might cause allergic reactions, so if you have any concerns about your own or somebody else's health or wellbeing, always speak to a qualified health professional. Remember, activities listed within the resource should always be supervised by an appropriate adult.

## Mini Lava Lamps



### Equipment:

empty, clean clear jar with a lid

jug of water

food colouring

vegetable oil

fizzing effervescent tablet (vitamin C or indigestion tablet)



### Instructions:

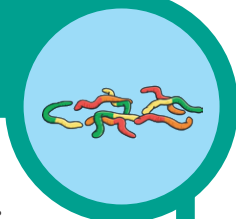
1. Half fill the jar with vegetable oil.
2. Add a few drops of food colouring to some water and pour into the jar so it is  $\frac{3}{4}$  full.
3. Wait a few moments for the liquids to separate.
4. Add the fizzing tablet to the liquid.
5. Put the lid securely back onto the jar.
6. Watch as the oil and water mix together and then separate.

### Alternative:

1. Pour oil into the jar until it is  $\frac{3}{4}$  full.
2. Fill a disposable syringe with water and add a few drops of food colouring.
3. Shake to mix.
4. Carefully drop a few drops of coloured water into the oil.
5. Secure the lid and give the jar a shake.
6. Watch as the water and oil separate.

twinkl.com

## Dancing Worms



### Instructions:

1. Depending on the size of your worms and container, you may need to cut them into shorter pieces.
2. Add three tablespoons of baking soda to a glass of lukewarm water.
3. Drop the worms into the glass and stir until mixed.
4. Wait 15 minutes for the baking soda to soak into the worms.
5. While you wait, fill the second container with white vinegar.
6. After 15 minutes, fish the worms out of the baking soda with a fork and carefully put a few (less is more) into the vinegar.
7. Watch as the worms start bubbling and rising to the top of the glass.

### Equipment:

gummy worms

baking soda

white vinegar

2 transparent containers or glasses

fork

knife & chopping board (optional)

twinkl.com

## Treasure Slime

### Equipment:

bucket, washing up bowl or suitable container/tray

cornflour

water

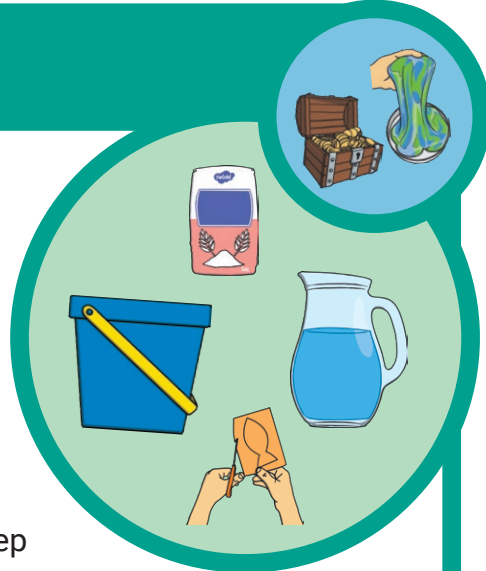
treasure (Science Cut-Outs can be laminated and hidden in the slime to find)

### Instructions:

1. Prepare your treasure. If using paper, laminate them to keep them intact in the slime.
2. Scatter some of your treasure in your container.
3. Pour half a box of cornflour into the container and add enough water until it forms a custard-like texture.
4. Scatter the treasure through the slime to distribute it evenly.
5. Let children discover the solid and liquid differences when they put their hands in to try and retrieve the treasure.

### Alternative:

- Treasure could include the name of a prize.
- Treasure could include letters to spell out a word.
- Treasure could include pictures of science equipment.



twinkl.com

## Silly Putty

### Equipment:

200g cornflour

150-200ml clear gel hand soap (hair-gel consistency)

gel food colouring

mixing bowl

mixing spoon

### Instructions:

1. Mix together the cornflour and soap in a bowl.
2. Add a little bit of soap at a time to form a dough-like consistency.
3. Add a few drops of gel food colouring
4. Mix together until the colour is evenly spread.
5. When the putty is moldable, a little bit slimy but not sticky, it is ready to play with.



twinkl.com

If you enjoyed this resource, why not try...

Free Parent Mixed Ages Taster Resource Pack

Free Times Tables Fact Fluency Practice Pack to 12

Free Parents' Taster Pack for Children Aged 5-7

Free EYFS/Reception Twinkl Handwriting Taster Pack

Free Parents' Taster Pack for Children (Birth to 5 Years)

Free Parents' Taster Pack For children Aged 7 - 11

Tricky and Common Exception Words Worksheets

Number Formation Tracing Strips 0-20

Dinosaur Addition within 10 Activity Sheet

KS1 Addition and Subtraction Maths Activity Sheets

The Very Hungry Caterpillar Pencil Control Activity

If you need us, just get in touch -  
contact [twinklcares@twinkl.co.uk](mailto:twinklcares@twinkl.co.uk)  
visit [twinkl.com/parents](https://www.twinkl.com/parents)

Explore and Discover More

twinkl