

# Science Challenge



## Upside-Down Glass Experiment

### You will need:

- A glass
- Water
- A thick sheet of paper or card that is bigger than the glass

### What you do:

1. Fill the glass with water right to the top.
2. Place the paper on top of the glass.
3. Place your hand on the paper, then quickly flip the glass over **(it's best to do this outside over a sink/bath in case it spills)**.
4. Remove your hand from the bottom of the glass.



whizzpopbang.com

**You should find:** The paper/card stays in place and the water doesn't spill out! This is because of air pressure and surface tension. Although you aren't aware of it, the air around us pushes in all directions. Look closely and you'll see a pocket of air trapped in the glass above the water. When you turned the glass upside down a few drops of water escaped, increasing the space taken up by the trapped air and lowering its pressure.

# Technology Challenge



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## Design Your Own Board Game

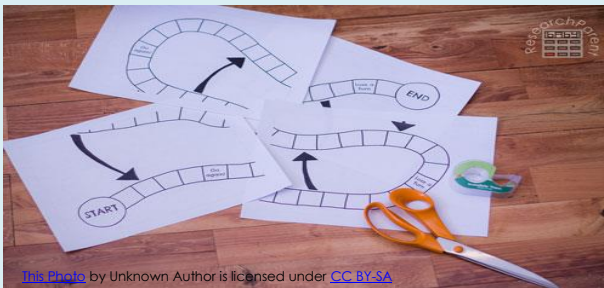
Your challenge is to design and make your very own board game. You don't need lots of fancy materials, just some imagination and one or two bits and pieces.

### What you need:

- Paper
- Pens/pencils
- Counters
- Dice

### What to do:

- You need to design your playing board. Think about other games that you've seen or played and pick out your favourite parts to put on your board.

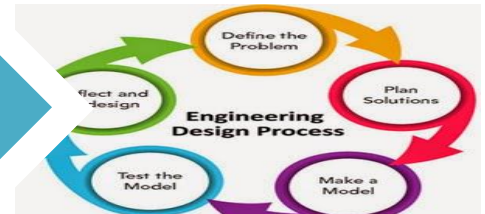


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- Decide on the rules of your game.
  - Where do you start?
  - How do you win?
  - Will there be questions or challenges to face?
- Find a partner to play the game with. Once you have played, think about anything you would like to change or make better.
- Have fun!!

# Engineering Challenge



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## Marble Run

Your challenge is to design and make your own marble run. The things you will need are bits and pieces that you can find around the house.

### You will need:

- Shoe box lid/cereal box or similar
- Tape
- Scissors
- Lollipop sticks or you could even use sticks from your garden
- Marble or small ball. You could even use Maltesers or rolled up blue-tack

### What to do:

- On the inside of the shoe box lid, mark on the cardboard base where you would like your lollipop sticks, or sticks from the garden, to go.
- You can stick your lollipop sticks down to the base by using a piece of tape placed half on the edge of the stick and the other half on the base. Put a piece of tape on both sides of the stick.
- In the sides of the box, mark and carefully cut out a hole for the marble to go into your run and another for the marble to come out at the end. **Ask an adult to help with the cutting out.**
- Once your run is made, have fun tilting and moving the box back and forth to try to get your marble from the start to the finish.



# Health & Wellbeing Challenge



## Burns Supper

The 25<sup>th</sup> January marks Burns Night, which is the celebration of a Scottish poet called Robert Burns. On Burns Night, a very traditional meal is cooked and eaten in many households in Scotland. Have you ever had a Burns supper before? Do you know what is traditionally eaten as part of a Burns supper?

A traditional Burns supper is made up of...

Haggis

Suede or Turnip  
(better known as  
'Neeps')



Potatoes  
(‘Tatties’)

Photo from <https://www.bbc.co.uk/newsround/16722720>

**If you and your family are planning on having a traditional Burns’ supper on 25<sup>th</sup> January, your challenge is to have a go at the following activities! Even if you aren’t planning on having a Burns’ supper, try out these activities with the meal you are having.**

1. Help out with the preparation of your meal. This could include washing or drying off the vegetables before they are cooked. Be very careful in the kitchen as there are lots of sharp and hot items! Make sure an adult is with you when you are helping.
2. Have a think about the different items of food on your plate. Where has each item come from? Were they bought at a supermarket or farm shop? Were any of the items grown in our local area? Talk about this with your family.
3. When you are eating your meal, think about the food you are eating. Have you tried this food before? Can you describe how the food tastes? Talk about this with your family.



# Social Studies Challenge



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## All about Robert Burns

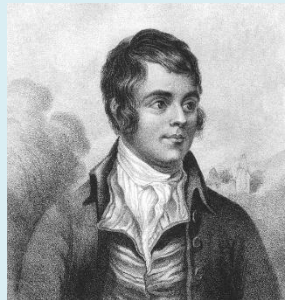
This week we are celebrating Burns Night, which is on 25<sup>th</sup> January. This day is important to many Scottish people as it is a day to remember the life of a Scottish poet named Robert Burns. Robert Burns was born on 25<sup>th</sup> January 1759 (which was 261 years ago!) and he is most famous for writing songs and poems. To celebrate Burns Night, many Scottish people eat a Burns Supper, wear tartan clothing, read Burns' poems and listen to bagpipes.

**Burns Supper**

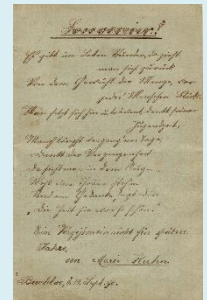


Photo from <https://www.bbc.co.uk/newsround/16722720>

**Robert Burns**



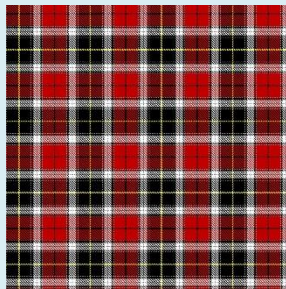
**Poem**



**Bagpipes**



**Tartan**



**Do you recognise any of these pictures? Have a think about the following questions and discuss them with your family-**

- Have you ever tried haggis? Or eaten a Burns supper?
- Have you read or heard a poem being read before?
- Have you worn a piece of tartan before?
- Have you ever heard bagpipes being played? What do they sound like?

**Have a go at creating a poster all about Robert Burns. On your poster, you can include drawings of the pictures above and other pictures related to Robert Burns. You could also have a go at writing some key words related to Robert Burns and his poetry.**

# Expressive Arts Challenge



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## Scottish Country Dancing

As we have focused our learning on Robert Burns and Scottish culture this week, we are going to have a go at some Scottish Country Dancing.

Click the link to watch and listen to The Wiggles 'Highland Fling'.

[https://www.youtube.com/watch?v=2ln3P\\_L8mX8&list=RD2ln3P\\_L8mX8&start\\_radio=1](https://www.youtube.com/watch?v=2ln3P_L8mX8&list=RD2ln3P_L8mX8&start_radio=1)



- Can you name the instruments that are being played in the song?
- How do we know that this is a Scottish dance? What are they wearing?

**Have a go at dancing along to the song and copying the dance moves that they do. Try really hard to copy their feet and the movements they do.**

- Can you point your toes and stand tall?
- Can you think of any other dance moves that may fit in with the music? Have a go at freestyling!