



# Challenges for the week beginning 29<sup>th</sup> June – Enjoy! Invention week with:

## Wallace & Gromit



### Science – Engineering

Gromit has been trying to wash the windows of highest buildings, but is struggling to reach them. He needs you to build him a catapult to launch him up there.

Need help? There are loads of options, [but click here if you need any ideas.](#)



### Maths Brains

Wallace is trying to build as many 3D shapes as he can, but just can't figure it out.

Using marshmallows or jelly sweets and spaghetti, see how many different 3D shapes you can make.

Hint: break the spaghetti in to smaller pieces, it makes it less likely to break or fall.



### Invention Time

As we all know, Wallace and Gromit are brilliant inventors. But, now it's your turn!

**Design an invention to solve a problem.**

Your invention needs to be original, so something that has never been seen or done before.

Think of a problem that would could solve or how to make something easier.

Think of people who may struggle with a task.

When you have designed it. write about it explaining how it would work, what it does and why it is important.

If you are pleased with your design, why not get your adult to help you enter the "[Primary engineer leaders award](#)" competition.



### Making task

Next job is to make a prototype of your invention. This is a model of your intention to help others see how it would work. It doesn't have to work (don't worry) but just to give a better understanding. This doesn't have to be actual size, just a small cardboard, paper or lego model.



### Historical inventors

Do some research into some of the most influential inventors there have ever been. People from Thomas Edison, Alexander Graham Bell, Grace Hopper and Garrett Morgan to Tim Berners-Lee or Sir James Dyson or even better, find someone different!

These people have all influenced our lives as we know them. So go and find out more about these incredible people.



### ICT task

Wallace and Gromit's adventures are made through stop motion animation. Stop animation is a tricky task where pictures are taken of the models and they are moved a tiny bit at a time.

There are lots of FREE stop motion apps available for all different platforms, why not download one and have a go.

Using models is VERY hard, so why not use paper and pictures on the floor. They are much easier to move.

Here is a REALLY simple version for you to look at:  
<https://www.youtube.com/watch?v=4pwDfxxRMNg>

### Art challenge

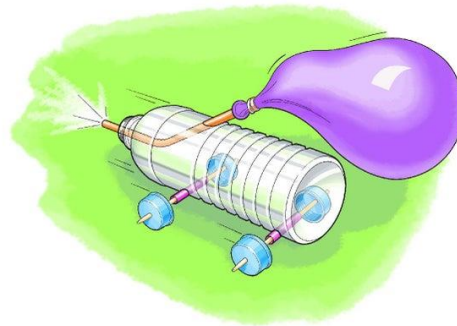
I know we all love an arty challenge, and last week's were pretty tough! So here is a bit of a nicer one, still hard but a bit more fun.

[Draw Wallace with Nick Park](#)



### More making:

[Have a go at making a balloon powered car.](#) (click the blue link for instructions if you need them or have a go first)



### Thoughts...

This week in school, Mrs Clayton has said she really misses getting hugs off her friends, so I put two big hands on the end of very long sticks to be able to hug her from a social distance. This got me thinking... What if I could make some of these to hug people...

<https://www.youtube.com/watch?v=QkJ4zyrjGMY>

Why not have a go at making some for yourself.

