Design & Technology at North

Look at these Photographs

What words describe how the Y4 children are working?

What skills did Y6 use when making their Viking Longboats?

What words did you come up with?

What words describe how the Y4 children are working?

What skills did Y6 use when making their Viking Longboats?

What words did you come up with?

What words describe how the Y4 children are working?

Did you say…

carefully?...

with good concentration?

I agree. They are. But these qualities are not special to DT.

They apply to everything we do if we want to be successful.

What skills did Y6 use when making their Viking Longboats?

Did you say, measuring?... cutting?... good use of many tools?

They needed knowledge too –

What are the best materials?

How do the materials work?

And they needed to do research too.

And that is Design and Technology

We need something.

What does it need to do?

Are there any other designs like it?

What are the best materials?

How can we best make it?

Can we make it look really good?

Now, MAKE IT!

Finished? Go back to check everything.

Now, you can use it!

Some designs must work over and over again

This bridge must be strong enough to have 1000s of vehicles travel across it every day.
(And people have to look at it every day.
So it must look good in its surroundings.)
What do you think? Does it look good?

Some designs don’t have to look so good…

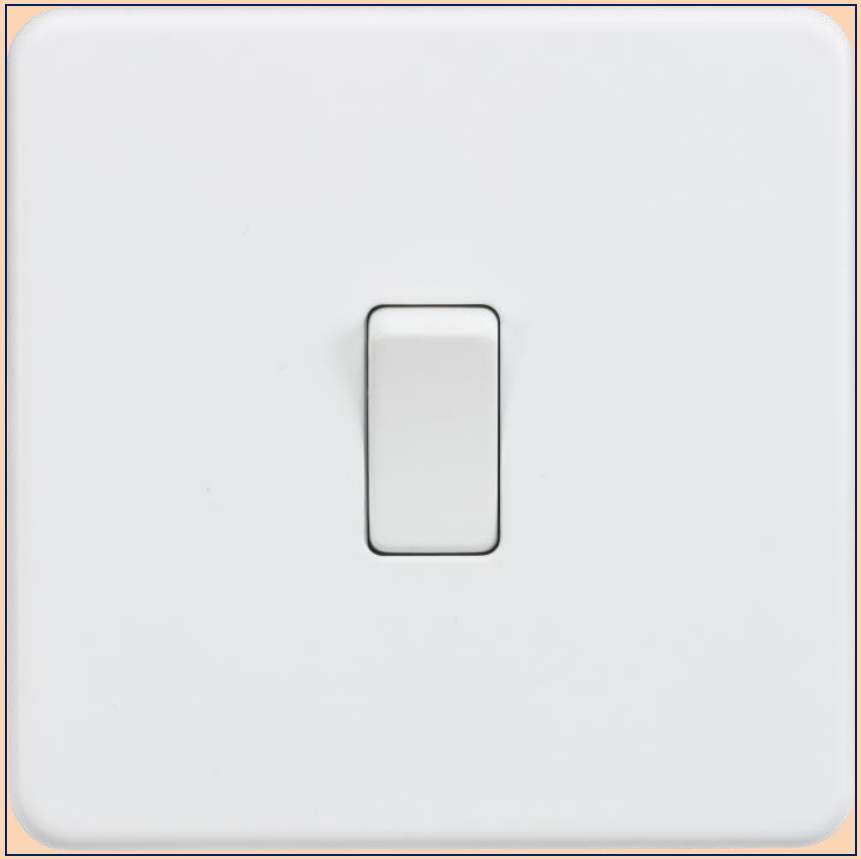
but they do have to work over and over

and over

and over

again.

(Actually I think this design is great – clean and simple.)



Some things only need to work once…

So if that is all it has to do it better do it perfectly.

Can you think of anything that only has to work once ?

(I wonder if your parents can think of anything?)

Here is a good example

The ring pull!

It only needs to work once.

There is an interesting history to the ring pull.

When cans were first made they did not have a top like this.

This ring pull was invented in 1975

By Ermal Fraze and Omar Brown.

It was called the

"Easy-open ecology end".

So what came before?

Well it all started with a can like this -

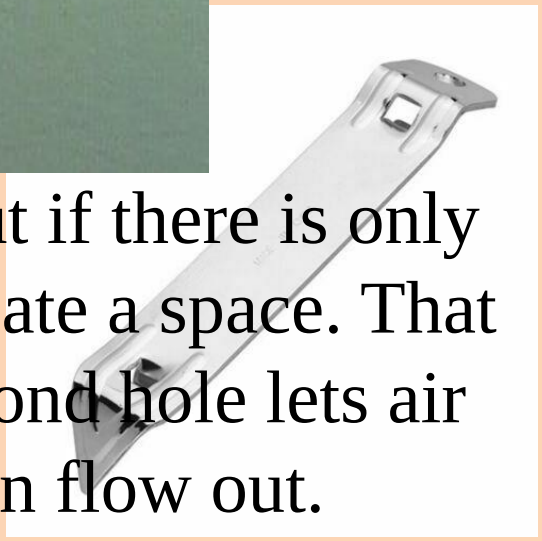
If you look closely you can see two triangular holes.

These were made with a tool like this – it is called a churchkey.

Well it all started with a can like this -

Do you know why there are two holes?

Do you know why there are two holes?

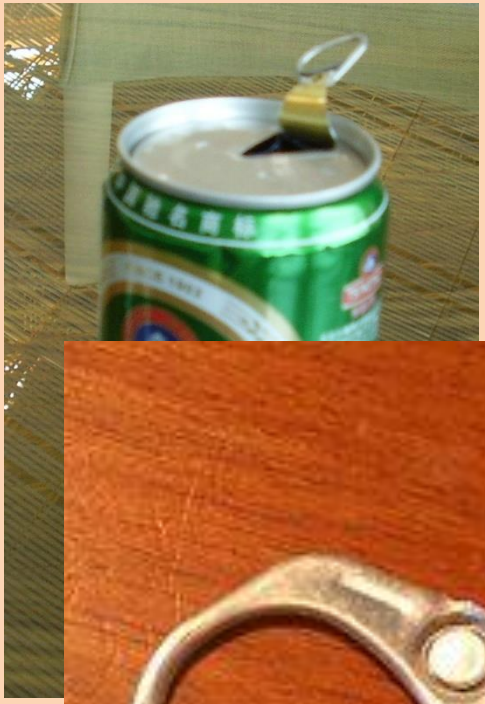


That is right. The liquid will not flow out if there is only one hole. As the liquid leaves, it will create a space. That has to be filled with something. The second hole lets air fill that space which means the liquid can flow out.

There is one problem with this…

In 1959, in the USA, Ermal Fraze was on a family picnic. Guess what? He had forgotten to bring his chuchkey. What to do? He was an inventor. Thinking there must be an easier way, he stayed up all night until he came up with the pull tab.

The Pull Tab



Pull-tab cans, or the discarded tabs from them, were called "pop-tops". Into the 1970s, the pull-tab was widely popular, but its popularity came with the problem.

People would just drop the pull-tabs on the ground and risk cutting their feet or fingers on them.

And it made litter of course.

Easy-Open Ecology End

So this tab creates no litter*.

Although it was invented in 1975, cans did not look like this in the UK until 1989.

It only has to work once. But it better work!

* Always recycle cans.

Back to that bridge

Sheikh Zayad Bridge, Abu Dhabi

Designed by the architect, Zaha Hadid

She was born in Baghdad, Iraq, 1950.

She attended University in the USA.

Set up a business in London.

She has won lots of Awards.

What Skills and Qualities did Zaha Hadid need to be successful?

She did not just design buildings

At North we have a designer's toolkit.
Here it is...

	I can take inspiration from previous designs in order to create ideas for my own design. I can observe and read about designs and explain why they were successful.
	I can create innovative designs which improve on existing products and I can create a use for my own end product.
	I can create different prototypes and evaluate their advantages and disadvantages, refining my ideas to choose the most appropriate design.
	I can use my practical skills to cut, join, glue, fix and repair my design, making sure that I have created a high quality product.
	I can identify problems and solutions while I make my product and I can make suggestions about how I could improve my design in the future.

When you make things you use that toolkit.

It is Zaha Hadid’s toolkit as well.

So, what are you waiting for?

Get designing

Get making

Where do you think Zaha Hadid started?

Thank you for listening to my assembly.

Work Hard.

Play nicely.

Be kind one to another.

Have a good week.