

16<sup>th</sup> May

### Memory Verse

What manner of man is this, that **even the winds and the sea obey him!** Matthew 8:27

### Something to read and something to tell

**16<sup>th</sup> May** is the anniversary of the death in 1703 of a Frenchman to whom all children should be grateful. Do you enjoy the stories “Little Red Riding-hood”, “Cinderella”, “Puss in Boots” and “Sleeping Beauty”? These, and others like them, were first written down by Charles Perrault (1628-1703). In today's Optional Resources files you will find an easy to read version of Cinderella. The Optional Resources files also contain the story of “Riquet With The Tuft”. This is a much less well known story which was also collected and published by Charles Perrault. The English version in the file is by Mrs Dinah Craik (1823-1827).



Stories such as these were first told no one knows when and shaped and altered as they passed down from generation to generation. They are a part of our heritage. We can imagine children listening by the light of a fire in a cottage to their grandmother or to a nursemaid in a grandly furnished night nursery: rich and poor alike have enjoyed them. Are you ready to do your bit? Make sure you can tell these basic stories. Then whatever happens they won't die out!

### An outdoor game to learn and a story from history<sup>1</sup>

On **16<sup>th</sup> May 1943**, during WW II, an RAF squadron took off for Germany carrying a payload of a very new and very special type of bomb. These were the famous “bouncing bombs” designed by a brilliant engineering designer, Sir Barnes Wallis (1887-1979): *Operation Chastise* had begun!

Before the war, Barnes Wallis had worked on aircraft and airship design. His work was characterised by outstanding inventiveness. When the war broke out in 1939 Barnes Wallis set himself a task. He wanted to shorten the war. What could he design that would be so effective that it would speed up the allied victory and so save lives?

During the Second World War, it was very important to the allies to destroy and disrupt industrial production of weapons and equipment in Germany. But most such targets were widely spread out or dispersed over Germany so it would be difficult to destroy them. Barnes Wallis therefore concentrated his thoughts on targets which could not easily be dispersed. He came up with the idea of destroying dams.

Of great importance to Germany were the Möhne and Eder dams in the industrial area of Germany's Ruhr Valley. When the dam was breached or broken the flow of water would cause flooding of mines, loss of vital water to steelworks and other industries and hydro-electricity supplies would also be hit. There would be other effects too such as water supplies for canals used for moving industrial supplies. If the dams could be bombed it would be the equivalent to a huge amount of bombing carried out on dispersed targets in one operation. This was the kind of war-shortening operation that appealed to Barnes Wallis. However, there was a big problem. None of the available bombs was powerful enough to breach these mighty dams. If much bigger bombs were to be used, bigger planes would be needed too and these were not available either.

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<sup>1</sup> Image: Bill Nicholls / Nant y Gro Dam

Like most boys, Barnes Wallis had enjoyed skimming stones as a lad. This game, sometimes called “Ducks and Drakes”, involves selecting a flattish stone and, with a horizontal spinning movement, hurling or casting it over a body of water such as a pond or even the sea when at the beach. If done correctly the stone, instead of sinking directly into the water, will make several bounces off the surface which carry it forward before it finally sinks. The more skilfully the stone is cast, the more bounces it will make before it sinks.

What would happen, Barnes Wallis wondered, if a bomb was made to bounce in this way? Could a bomb be dropped upstream of a dam, bounce over the water, and then hit the dam having sunk right up against it? If a bomb could be exploded under water right against a dam in this way, a larger than normal bomb would not be needed to breach it. As it bounced too, it would skip over defences such as anti-torpedo nets placed ahead of the dam to protect it. There was much official scepticism to be overcome but Barnes Wallis persisted and convinced his critics.



Tests and experiments began. Barnes Wallis and the other engineers considered the problems. What was the best shape for the bomb? What was the optimum speed for it to rotate? From what height would such a bomb need to be dropped? All these questions had to be satisfactorily answered before a raid on the dams could take place. Scale models were used and a disused reservoir dam at Nant-Y-Gro in the Elan Valley in Wales was bombed to test them. If you are in that area on holiday you can still walk by this dam, which



remains much as it was left after the experimental bombing, although the trees have now grown up making things hard to spot.<sup>2</sup>

The best time to breach the German dams was when they were fullest. This was after the spring rains had fallen. This was why this time of year was chosen for the raid. 16<sup>th</sup> May was chosen as the exact date because then the moon would be full, giving the pilots the best possible light for their operation. 19 Lancasters of the 617 Squadron under Wing Commander Guy Gibson took off from RAF Scampton (Lincolnshire) in three waves to attack the Möhne, Eder and Sorpe Dams.

*Operation Chastise* was extremely successful in achieving Barnes Wallis aim of shortening the war by its effect on German production and so saving perhaps millions<sup>3</sup> of lives. The picture shows the damage done to the Möhne Dam. Can you see the water pouring across the breach in the centre of the dam? But the brave RAF pilots who carried out the raid did so under intense anti-aircraft fire and very difficult conditions. Of 133 airmen, 53 lost their lives. Barnes Wallis found it hard to recover from the sense of grief and responsibility this caused.



Barnes Wallis based his brilliant idea on the simple game of skimming stones. Can you do it? It is not difficult but takes practice at first. Once you have the knack however it is great fun. Here are some hints on how to do it.<sup>4</sup> You need to be outside (don't try in the bath!) at a pond, lake or beach.

<sup>2</sup> You can see old film of the tests (not at Nat-Y-Gro though) here: <https://www.youtube.com/watch?v=bOGRTlrYCIE&t=3s>

<sup>3</sup> <https://www.engineeringclicks.com/bouncing-bomb/>

<sup>4</sup> Instructions can be found here: <https://scoutlife.org/hobbies-projects/funstuff/9298/how-to-skip-rocks/>

First find a flattish stone. Hold the stone in your right hand (left if you are left handed). Curve your first finger round the edge of the stone, gripping it between your thumb and second finger. The stone needs to begin its journey with the flat side parallel to the water i.e. it must be horizontal as you throw it. The next bit is tricky to describe but you pull your hand and wrist back, and then flick it forward and release the stone forwards over the water. The stone should spin away, bounce up when it hits the water – perhaps several times – before sinking. It will almost certainly *not* do that the first time you try, of course. You will have to keep on practising until you have the technique but it is well worth the effort.

### Something to think about

Sometimes you hear people say that Christians should never go to war. This is called Pacifism. Pacifists claim that Jesus taught that we should lay down all weapons and instead promote peace. Wouldn't the world be a much better place if we could do this? But God is not a pacifist. The Bible has many examples of God's vengeance on His enemies both in the Old Testament, where his people were sometimes told to kill those who had rebelled against God's laws and in the New Testament where in the Book of Revelation shows Jesus overcoming His enemies with war.

In fact, the very freedom that Pacifists enjoy to live out their ideals was bought with the blood of *non*-pacifists. Soldiers, sailors and airmen such as the *Operation Chastise* crews who died did not die because they loved war. They died, in part, so that in future pacifists could promote and exercise their beliefs without fear of death, torture, or imprisonment by those who are belligerent (warmongering, eager to fight) and stronger than they.

Christians should always do their best to promote peace. When personally insulted or attacked we should turn the other cheek. We should allow ourselves to be cheated. Wherever peace is a possibility we should follow it. But there is a point where this is not possible. When the lives and freedom of *others* are threatened we must stand up for those weaker than ourselves:

“If thou forbear to deliver *them that are* drawn unto death, and *those that are* ready to be slain; if thou sayest, Behold, we knew it not; doth not he that pondereth the heart consider *it*? and he that keepeth thy soul, doth *not* he know *it*? and shall *not* he render to *every* man according to his works?” Proverbs 24:11-12.

“I believe that war is a lesser evil than Hitlerism, I believe that Hitlerism must be killed before war can be killed,” wrote pacifist A A Milne. Can you see the problem with this idea?