

## Key Stage 2 Invention Challenge

Now that we have visited Beamish and experienced what it might have felt like working down the coal mines during the Industrial Revolution, and heard about the real accident that happened to 12 year old James White, I would like your child to think about Designing and Making a system using a simple mechanism to get coal safely and efficiently from below ground.

A mechanism is a device which takes an input motion or force, and outputs a different motion and force. The point of a mechanism is to make the job easier to do by allowing a smaller force to have a greater effect. Mechanisms most commonly used are levers, gears and pulleys.

I am challenging the children to have this designed and made by the end of the Easter holidays, ready to bring into school on Wednesday 15<sup>th</sup> April and share their inventions with the rest of the class. PLEASE do not go out and spend money – I would like the children to be as inventive as possible and just use everyday junk material from home.

For example, a simple pulley can be made with cardboard, scissors, glue, string, wooden skewer, a plastic bottle and bottle cap.

<https://www.youtube.com/watch?v=rc0cpp3i8GA>

Have fun and enjoy inventing. I know we have an amazingly creative bunch of children (and parents!) so I can't wait to see their inventions!

