KS1 Optional Science Homework - Autumn 2


Milly Hennayake is an engineer who keeps people safe from flooding. She grew up in Sri Lanka and the UK. Milly says that she didn't know much about engineering until a school trip which made her realise that engineering can help with great scientific discoveries.

Engineers have to think about many, many things when they are designing. Milly would like you to design a bridge. When designing bridges, engineers need to choose a strong material that is weather resistant. The materials also need to be shaped in a way that makes them extra strong. In this activity, you're going to fold paper differently to make mini bridges and test how much weight each can hold.

You will need: paper, tape, books or wooden blocks, toys or a coin to put on top

Instructions:

1. Fold the first piece of paper in thirds and secure each end with tape.
2. Fold the second piece of paper into quarters and secure each end with tape.
3. Concertina or zig-zag fold the third piece of paper.
4. Build up the blocks so they form two ends of a bridge and place the paper bridges on top.
5. Slowly place coins or small toys (in the same order) onto each bridge and record how many each section can hold before collapsing.

Extension: Try making the bridge using different materials e.g card, kitchen foil, bubble wrap

Take a Science Selfie and post your photo on Tapestry! Which bridge was the strongest and which was the weakest? If you would like to have your photo included in our weekly school newsletter, please e-mail your photo to admin@burlingtoni.org.uk