Young Engineers

June 2nd 2017

In our young engineers class today, we learnt more about energy! More specifically, we learnt about potential and kinetic energy! We had fun discussing energy, jumping around and then followed instructions to make an amazing ball launcher! Let's read more on what we did today.

As a warm-up activity, we tried jumping without bending our knees and measured how high we managed to jump. We then bent our knees and did the same thing. By bending our knees we found that we could jump so much higher, because we had created more 'potential energy'. The more potential energy we have, the higher we are able to jump as it is changed into 'kinetic energy', which is what we need to move. We tried sounding out 'potential energy' and 'kinetic energy' together in class and was reminded to remember it for later.

Everyone looked at an example of a completed ball launcher and was shown how it works. They loved it and exclaimed "Happy- birthday!", every time the ping pong ball was launched. We all looked at what exactly launches our ping-pong ball. When we pull the the string further, the ball is launched further. Pulling the string further creates more 'potential energy' similar to when we bent our knees, when we jumped earlier in the lesson. The 'potential energy' is then changed into 'kinetic energy' which launches the ping-pong ball.

A complete set of easy-to-follow instructions were written and illustrated on the board, as we started to assemble our ball launchers. Each student was given his or her own plastic bottle (already cut in half), 2 rubber bands, scissors, 1 ping-pong ball, thread and a choice of beads. We helped each other to carefully assemble each piece, cutting, threading, inserting and tying knots where we needed to and like all great engineers, we tested our launchers to see where we could improve them. We had to ask for assistance from a teacher when we needed to make holes in our bottle tops, to insert the thread. We had so much fun!

Once we finished assembling our ball launchers, we started to decorate them using colour markers. We drew all kinds of unique and wacky designs on our ball launchers as well as on the holder, which we can use to store our ball launchers when are done playing with them.

When we were done with our ball launchers and we cleaned everything up, we were asked if we could remember the two types of energy we learned about today. Some of us remembered and some of us needed some reminding. We learnt a lot and had a lot fun today, which is the most important. Next time we will have more fun learning about engineering and the world around us. See you next time!

Teacher Eric