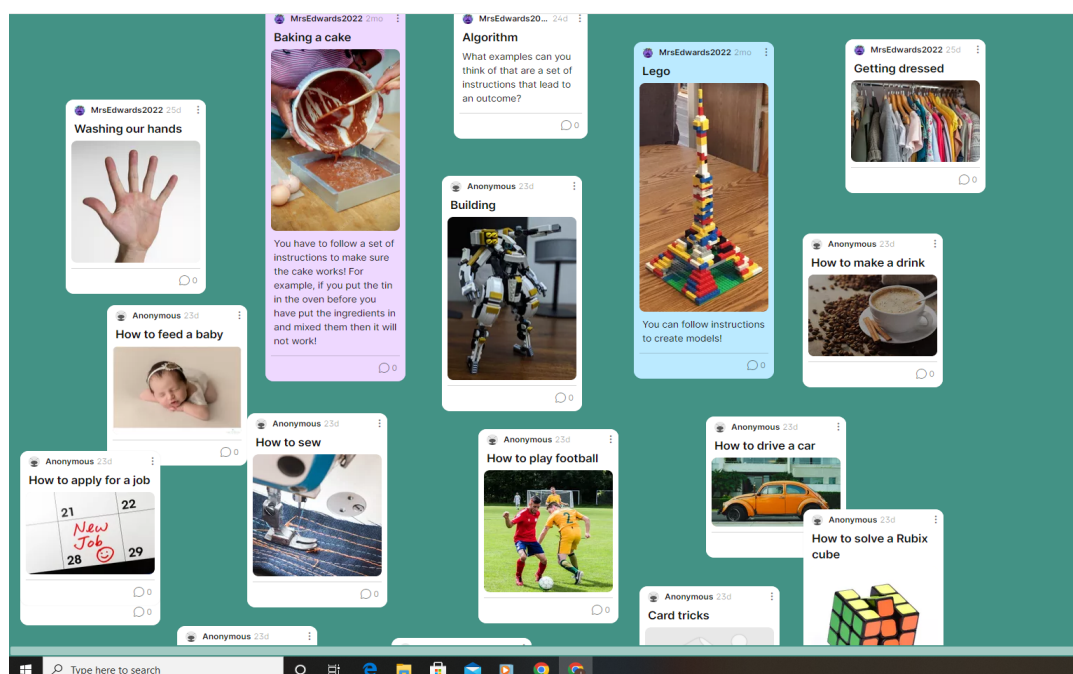


A whole school approach to exploring algorithms

We had a real focus on coding and algorithms across the school.

An algorithm is a set of instructions or series of steps to achieve an expected outcome. We use algorithms all day long! We aspire for the children to use the correct vocabulary and recognise the frequency of algorithms in our day to day lives for example, baking a cake, washing your hands, crossing the road etc.

As individual classes we all contributed to this whole school Padlet. We thought about ideas of things in our everyday lives that involve algorithms. We thought of excellent examples including getting dressed, solving a Rubix cube, washing hands and how to play football. As we saw the suggestions from other classes we were able to generate our own new ideas.



We discussed the main vocabulary such as algorithm, padlet, debug and specific. Children were confidently using the correct vocabulary and most were able to give definitions too!

Then it was time to introduce our robot. An adult acted as a 'robot' and had been instructed to follow the children's instructions, or 'code' precisely. One class in particular found it very funny when the robot quite literally 'spread the jam' by putting her hand in the jar and spreading it all over the table! This began discussion about the 'bug' and 'debugging'. They used excellent problem solving skills. Language became more specific and targeted once these problems had occurred.

After the robot had successfully made a jam sandwich the children were given a chance to record their code. Children in Reception did this by cutting and sequencing pictures, some even wrote the steps underneath using their phonics. Year 2 wrote bullet pointed lists, year 3/4 typed their code onto the Chromebooks and Year 4/5 scribed their ideas on whiteboards. It was great to see such

Here are some examples of our lessons that we all contributed to the padlet. All children can access this padelt in their classrooms to see how other classes found the jam sandwich activity.



This was a wonderful experience to look at some 'coding' without **needing** to use any technology. Some classes extended their skills by recording their code on the Chromebooks.

From this activity we are going to be thinking about other ways we can make links across the school and show the progression of computational thinking. We will be looking to appoint some keen digital leaders from our KS2 classes to support this. We are also looking at implementing an online way to record the progression across the school. What a wonderful experience!