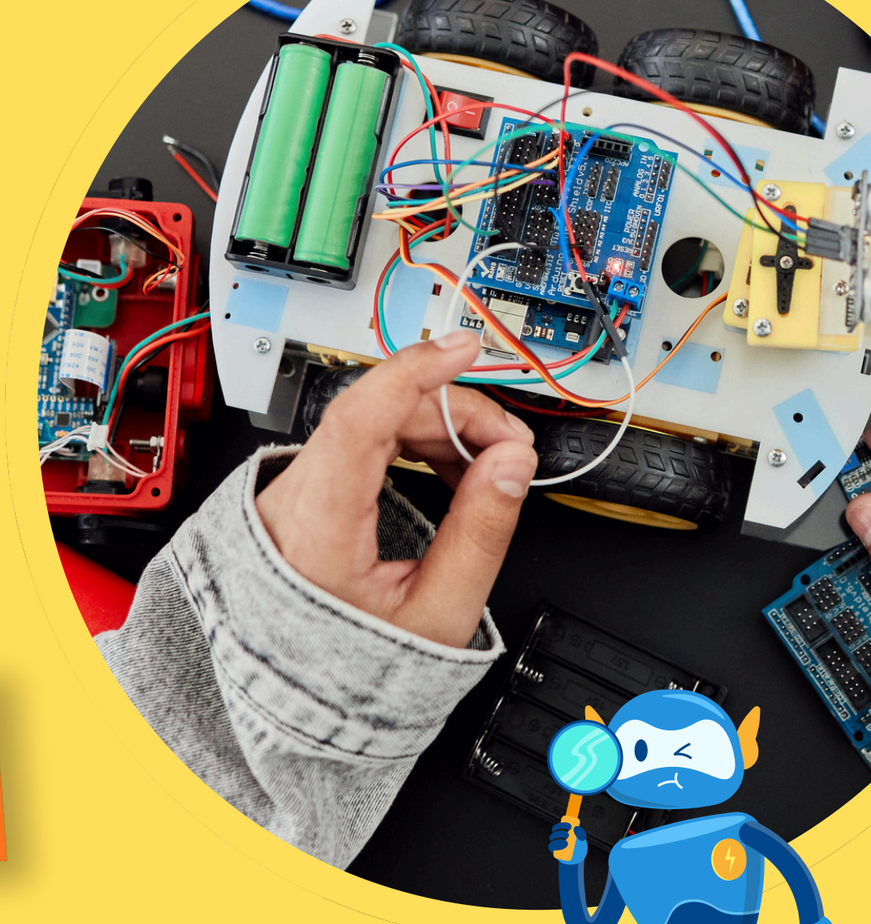




STEM TERM 4

DESIGN, CODE & CREATE

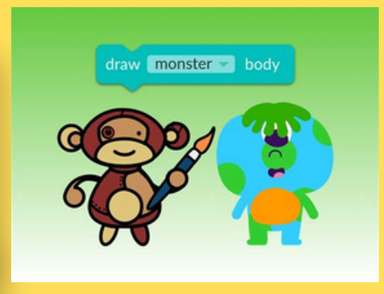
Students will develop their skills in Design & Technologies and Digital Technologies through hands-on challenges. They will build, design, code, test and improve their ideas while exploring circuits and programmable technologies including Blockly, micro:bits, Scratch and Makey Makey.

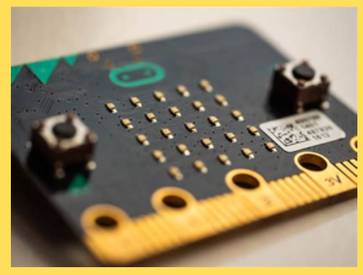
Year 3 - Create & Code

Students will explore how simple electrical circuits work and use their knowledge to design and build a light-up Haunted House. They will develop confidence in building, joining and working with different materials while learning how to test, evaluate and improve their designs. Students will also continue to develop their coding skills through unplugged coding activities, Blockly programming and micro:bit challenges. They will explore key coding concepts including sequences, variables, inputs and outputs, applying their knowledge to create and solve challenges.

Year 5/6 - Creative Coding

Students will apply their knowledge of circuits, sensors and coding through three hands-on projects.
They will design and build a Smart Night Light using a micro:bit light sensor, create and program a model using the Elecfreaks Wonder Building Kit, and develop an interactive Scratch + Makey Makey operation game.
Through these projects, students will develop important skills in designing, coding, problem-solving, troubleshooting and improving their ideas. They will also have opportunities to be creative, test their thinking and see how technology can be used to create practical and interactive solutions.



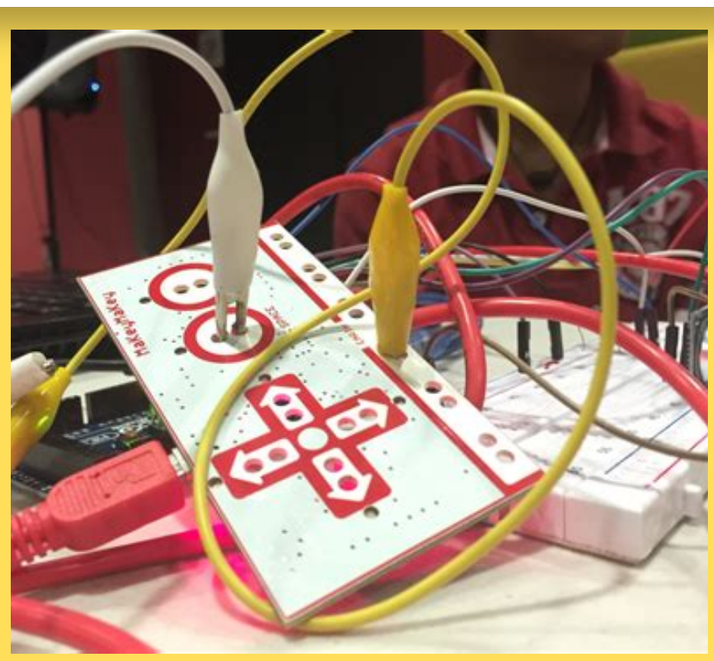




Year 4- Design & Program

Students will discover how simple circuits work as they design and build their very own light-up (Haunted)House. They'll experiment with switches, lights and different materials to see what makes a circuit work – and what happens when it doesn't!
Students will then jump into the world of coding, using MakeCode and Scratch to create fun and interactive projects. They'll use Makey Makey and micro:bit to discover how physical actions, such as pressing, touching or moving, can control digital outputs.
Along the way, students will develop their creativity, problem-solving and coding skills as they design, build, test, debug and improve their creations.





.

TEACHER - PAULA GAUGHAN