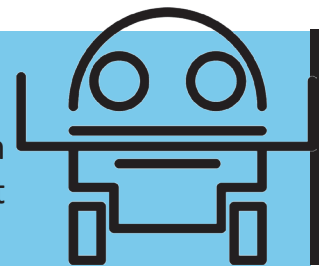


# Year 9 Product 'Robotics'



You will endeavour to develop a wider understanding of Lego Mindstorm programming languages, robotic construction, programming development and evaluation of your work.

## KEY WORDS

Programming  
Evaluate  
Mindstorm  
Sensor  
Colour Sensor

Ultra-Sonic  
Input  
Output  
Motor  
Process

Loop  
Flow  
Control  
Scratch  
EV3 Classroom

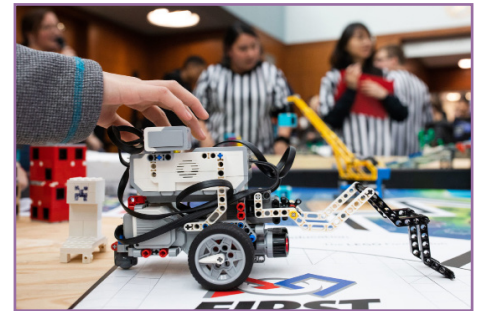
Programming Block  
(P block)







## Wider Study Opportunities?

**Careers** - Designer, Entrepreneur, Trades, Home DIY, Personal projects, Apprenticeships, STEAM

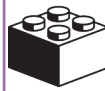
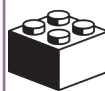

**GCSE and A-Levels** - Art, Graphics, Textiles, Photography, Product Design



## Some of your learning will include:

-  Constructing a Lego MINDSTORM robot by following a step-by-step construct sheet accurately.
-  Developing programming code on two different programming packages, EV3 Classroom and the older LEGO mindstorm.
-  Running your programme successfully to complete tasks.
-  Evaluating your programming.

## Assessment and Feedback:

-  **Assessment Objective 1:** Show your understanding of the two programming packages.
-  **Assessment Objective 3:** Develop basic programmes, run and then evaluate the programming performance and provide feedback successfully.
-  **Assessment Objective 4:** Read, understand and write code to achieve the program specification accurately.

## Why this? Why now?

To broaden your knowledge and understanding of robotics and their application in industry. You will also continue to develop your wider understanding of materials and processes, in preparation for GCSE and A Level Product Design. This knowledge combined, will help you begin your KS4 journey with a strong foundation for creativity in design, making, and evaluating all kinds of projects and techniques., including your own strengths and weaknesses.

