Teaching and Learning Content: Design and Technology
Year Group: 8
Half Term 4

MEADOW PARK
SCHOOL

Table Art Embedding systems and control and Computer Aided Design and Manufacture (CAD,CAM)	

Home Learning:
Students are expected to complete a homework research project over the half term linking to their classwork. Key vocabulary is expected to be practiced at home as it will be tested in a spelling test.

Key Questions:
- **Innovation and Technology**
  How can innovation and technology be used to transform a room of create an immersive event?
- **Circuits**
  What is the difference between a parallel and a serial circuit? What is an LED? How can a microprocessor be used to control a system?
- **Design context**
  Why is it important to establish a sound understanding of the design context? What is the relevance of developing a brief and design specification?
- **Computer Aided Design (CAD)**
  What are the advantages and disadvantages of using CAD?
- **Computer Aided Manufacture (CAM)**
  What are the advantages and disadvantages of using CAM?

Diagnosis
- Retrieval activities
- Mini whiteboard activities

Therapy
- Teacher Demonstration
- DIRT tasks
- Peer to peer support
- Whole class feedback
- WAGOLL

Students will:

- Explore enterprising ways that technology can be used to transform a room using light.

- Understand how circuits and microprocessors can be used in systems.

- Develop confidence in writing design briefs and specifications.

- Experiment with CAD & CAM.

Testing
- Students will be tested on the programing skills
- Students will write critically about the work produced