# BLESSED TRINITY LEARNING PROGRAMME

## SUBJECT: DT-Electronic Products YEAR: 7

| Title | Learning Objectives | Classroom Activity | Recommended Homework | Marking & Assessment |
|---|---|---|---|---|
| **Mood Light** | **Designing Skills**<br><br>Designing simple circuit using Circuit wizard<br>Transfer circuit designs onto PCB MakeIt programme.<br>Writing simple specification used to guide designing.<br>Annotation as a tool for design clarification<br>Designing against a specification<br>Requirements of a final design.<br>Using 2DDesign to develop final designs<br>Writing a manufacturing plan<br>Evaluating products<br><br>**Making Skills**<br><br>Manufacturing a circuit board using PCB MakeIT<br>Wiring of a USB<br>Soldering components onto circuit board<br>Transfer and cutting of design using the laser cutter<br><br>**Knowledge & Understanding**<br><br>Working safely in Electronics<br>Recognition of components, symbols and their properties.<br>The design process<br>Electricity in our lives<br>Series and Parallel circuits<br>Simple circuits | Produce a specification which provides an outline from which to design and evaluate a product<br><br>Designing a simple circuit using Circuit Wizard<br><br>Converting circuits onto PCB MakeIt programme<br><br>Manufacturing a circuit on Camm 2<br><br>Soldering skills including H&S<br><br>Populating circuit boards<br><br>Manufacturing USB plug and lead<br><br>Designing casing<br><br>Developing design on 2 D Design<br><br>Writing plan of manufacture<br><br>Manufacturing casing on laser cutter<br>Assembling product<br><br>Self and peer assessment throughout the designing and manufacturing process<br>Self and peer evaluation of mood lamp | Images which could be used on the casing<br><br>Analysis of existing products<br><br>Moodle link to electricity in our lives animation<br><br>Moodle link to simple circuits<br><br>Annotating initial designs<br><br>Annotating final design<br><br>Moodle link to building circuits<br><br>Moodle link to experimenting with circuits<br><br>Revision | Written feedback and direction for improvement on worksheets<br><br>Two stars and a wish sticker at least every 6 weeks<br>Verbal feedback we<br><br>Hen working on computers and machinery<br><br>Pupils to investigate and analyse their product/project using self and peer assessment.<br><br>Pupils have evaluated their design work throughout<br><br>Pupils will be creative in analysing their own products and seeing how they can improve.<br><br>Pupils will use feedback from others in producing their evaluation<br><br>Pupils will use the grow sheet to assess how they have achieved and what they need to do to improve<br><br>Final assessment carried out by teacher. Level awarded for designing, making and also an end of rotation test. |