



Project

Electronics

SECONDARY



1 INTRODUCTION

Electronics is very diverse field, and while some technicians/engineers work across multiple aspects of electronics, specialization is increasing in areas including the assembly and wiring of electronic products; the designing of prototype circuits; the installation and commissioning of equipment including customer support; service and maintenance; monitoring and testing sub-assemblies or systems; and approving fit-for purpose and simulating outcomes. They will need to work with a wide range of both hand and computer tools and should be capable of explaining elements of complex electronics principles to clients.

2 DESCRIPTION OF PROJECT AND TASKS

2.1 Day One (AM)

2.1.1 Breadboard Technique

- Breadboard a circuit from a given schematic
- Breadboard practices as outlined in file; Good Breadboarding Practices
- Follow World Skills Standards Specifications section 6
- Link to WSS

2.2 Day One (PM)

2.2.1 Fault Find and Measurement

- Identify/repair fault conditions in electronic circuits
- Use various methods of measurement related to the application of electronics
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- Follow World Skills Standards Specifications section 2 and 3
- Link to WSS

2.3 Day Two (AM)

2.3.1 Assembly

- Assemble a given circuit using through hole technology
- Follow World Skills Standards Specifications, Section 6

2.3.2 Assembly and Measurement

- Link to WSS

2.4 Day Two (PM)

2.4.1 Circuit Analysis and Rework Technique

- Rework a given electronic circuit using soldering techniques



- Reverse engineers a provided electronic circuit and revert to a schematic diagram
- Follow World Skills Standards Specifications, Section 6

2.4.2 Assembly and Measurement

- Link to WSS



NUMERACY



PROBLEM SOLVING



READING