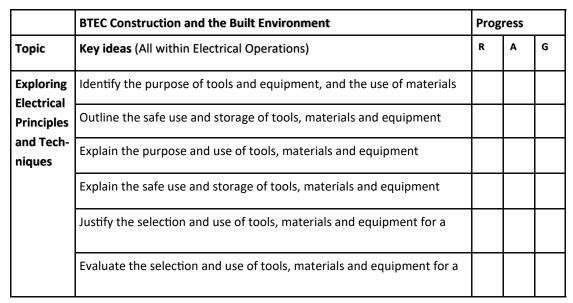
High Tunstall College of Science Curriculum Intent

Unit 9: Exploring Electrical Principles and Techniques

<u>Leaning Aim A— Understand tools, materials and equipment used</u> <u>for electrical operations</u>



Lesson	Learning Focus	Assessment	Key Words
1	Introduction to Unit 9: Learning Aim A. Understand the purpose/use of the following electrical tools & equipment: Measuring tape; Cable Cutters; Cable Strippers; Junior Hacksaw	Live marking/Unit assessment task	Hand tools, Equipment, Electrical Operations
2	Understand the purpose/use of the following electrical tools & equipment: Pliers; Stripping Knife; Screwdrivers; Spirit Level; Electrical testing equipment	Live marking/Unit assessment task	Hand tools, Equipment, Electrical Operations
3-4	Understand types of cables; electrical fittings and other fittings used within electrical operations	Live marking/Unit assessment task	Materials, Cables, Fittings
5	Safe use and storage of tools, materials and equipment for electrical operations: General use of Personal Protective Equipment (P.P.E.); Correct Health & Safety; and clean working environment	Live marking/Unit assessment task	Electrical Operations, Personal Protective Equipment (P.P.E.), Health & Safety
6	Safe use and storage of tools, materials and equipment for electrical operations: Safe handling when lifting and moving; Correct safe use; Cleaning and Storage upon completion of work	Live marking/Formative Assessment & Deep Marking Grid/Unit assessment task	Electrical Operations, Personal Protective Equipment (P.P.E.), Health & Safety
7-10 Assessment task (15 minute presentations)	Assessment task 1: (L1P/L2P) Five minute oral presentation to explain the following for a minimum of 5 tools or items of equipment, 2 types of cable, 3 types of electrical fittings and 3 types of other fittings (Minimum of 13 in total): • Purpose • General & Safe Use • Safe Storage	Final Unit Assessment task 1 (L1P/L2P) Expectations: * Individual presentation to the rest of the class * 5 tools/2 cables/3 electrical fittings/2 other fittings from the list provided and taught in lessons * Clear presentation using preparation sheet * PowerPoint slides can be used if needed	
Assess- ment task (3 hours)	Assessment task 2: (L2M/L2D) Written statements for the tools and equipment selected for the oral presentation to cover the following: • Justification of use for a specific electrical task • Evaluate the selection and discuss a suitable alternative	Final Unit Assessment task 2 (L2M/L2D) Expectations: * One extended statement for each of the 13 tools & equipment * Written explanation in detail using technical terminology * Discuss specific electrical tasks within the construction industry * Alternative tools must be plausible and suitable for the task in question	