



## Electro City Builders Workshop

### Lesson Outcomes:

1. To construct a series circuit and know the different components
2. To be able to use a switch and understand their purpose in a circuit
3. To associate metals as a good conductor of electricity.

### About:

This workshop uses LEGO® bricks to enable pupils to work creatively. Pupils can work as individuals, pairs or in small teams collaboratively to design buildings and cities. They will learn about circuits and construct a series circuit to light up a light bulb in their own building. Pupils will use switches, buzzers and motors and explore their various functions.

### National Curriculum Links:

#### KS2:

- Pupils will learn how to construct a simple series circuit and be able to name their basic parts.
- Pupils will understand the importance of a complete circuit as they will be able to light up their buildings
- Switches are also included in this design
- There is a brief discussion about crocodile clips and metal wires making links to conductors and insulators
- Pupils will learn how the various components (including buzzers and motors) function in a circuit
- Pupils will learn that adding more cells to a circuit affects the brightness of a lamp.

### Differentiation:

1. There is a variety of electrical components for pupils to investigate and explore.
2. All pupils are able to build and join in with this task.
3. The huge selection of LEGO® bricks, allows pupils to fulfil their creative building skills.