

Grade 6 - Electrical Unit

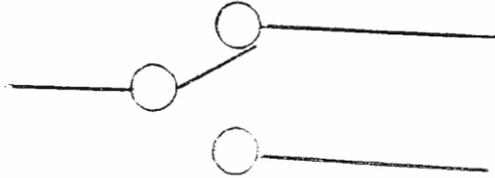
Names of the Group Members:

Electical Symbols

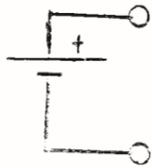
SPST Switch



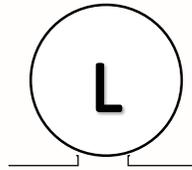
SPDT Switch



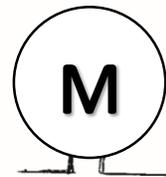
Battery



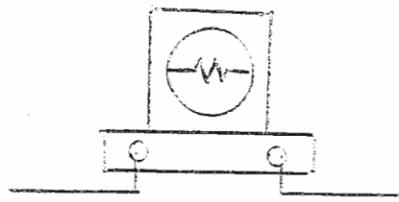
Lamp



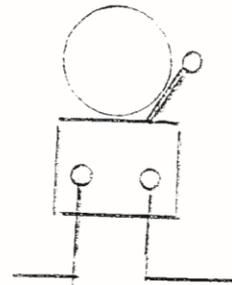
Motor



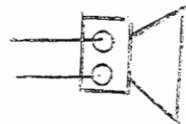
Buzzer



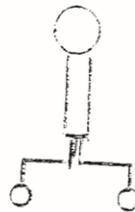
Bell



Speaker



Microphone



Cable/Wire



Electrical Experiment #1

Description: One switch will turn on one lamp.

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #2

Description: Two switches in series will turn on one lamp.

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #3

Description: Two switches in parallel will each turn on one lamp.

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #4

Description: Two switches in parallel will turn on one lamp *each*.

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #5

Description: One switch will turn on two lamps in series.

Equipment:

- SPST Switch
- Lamp Holder
- Buzzer
- Staples
- Wire

- Battery
- SPDT Switch
- Lamp
- Bell
- Board
- Telephones

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #6

Description: One switch will turn on two lamps in parallel.

Equipment:

- ___ SPST Switch
- ___ Lamp Holder
- ___ Buzzer
- ___ Staples
- ___ Wire

- ___ Battery
- ___ SPDT Switch
- ___ Lamp
- ___ Bell
- ___ Board
- ___ Telephones

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #7

Description: One switch will turn on a lamp, the other will turn on a buzzer.

Equipment:

- SPST Switch
- Lamp Holder
- Buzzer
- Staples
- Wire

- Battery
- SPDT Switch
- Lamp
- Bell
- Board
- Telephones

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #8

Description: One switch will turn on a lamp, but you need both switches on
To turn on the buzzer (bell).

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #9

Description: Two switches can turn on/off the lamp independently.

Equipment:

- SPST Switch
- Lamp Holder
- Buzzer
- Staples
- Wire

- Battery
- SPDT Switch
- Lamp
- Bell
- Board
- Telephones

Schematic Diagram

Pictorial Diagram

Description _____

Electrical Experiment #10

Description: Two phones that can communicate with each other.

Equipment:

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> SPST Switch | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Lamp Holder | <input type="checkbox"/> SPDT Switch |
| <input type="checkbox"/> Buzzer | <input type="checkbox"/> Lamp |
| <input type="checkbox"/> Staples | <input type="checkbox"/> Bell |
| <input type="checkbox"/> Wire | <input type="checkbox"/> Board |
| | <input type="checkbox"/> Telephones |

Schematic Diagram

Pictorial Diagram

Description _____

