

# Circuits

## **Light Globe Circuit:**

Resistor  
Battery  
Light Bulb  
Switch

## **Fan Circuit:**

Thermistor  
Switching Circuit  
Resistor  
Battery

## **Microphone Circuit:**

Transistor  
Transducer  
2 x Resistors  
Battery

## **Air Conditioner Circuit:**

Battery  
Thermistor  
Variable Resistor  
Electronic Switch  
Air Conditioner

## **Buzzer Circuit:**

Transistor  
Battery  
LDR  
Buzzer

## How to Play

### How to set up:

Deal out 5 cards to each player, and put the remaining deck face down in the centre middle of the area in which the game is played. This will be the draw pile. Determine the order in which players will take their turn.

### How to play:

A player can only play two cards during their turn. This may be an Electrical Component Card or an Activity Card. If a player uses an Electrical Component Card, this means that the component is being used in the formation of an electrical circuit. If a player uses an Activity Card they will be able to either, Steal an Electrical Component Card the opposition has played, Block an opponent from stealing a card, or Swap one they have played with their opponents card. After an Activity Card is used, it will be put in a pile next to the draw pile, and will not be used again. At the end of each turn, a player must draw as many cards as necessary to maintain 5 cards in their hand. A player is allowed to switch components from any uncompleted circuits that they are building.

Snap: Remove the Activity Cards from the deck. Deal out the cards evenly between each player. One by one a player will place a card face up. When consecutively placed cards match, the players must place their hand over the pile of cards as quickly possible whilst calling out snap. The fastest player wins the pile, and must add it to their own cards.

### How to Win:

Short Game: To win a short game, the player must be the first to complete any circuit. If more than one player completes a circuit, then the player with the highest value circuit wins.

Long Game: To win the game a player must be the first to earn \$5000 and they must also have created at least 2 circuits. If two players earn \$5000 at the same and have at least 2 completed circuits, the player which has created the most circuits, or the player with the most higher value circuits wins.

### Building a Circuit:

A player can build any of the following circuits. To complete each circuit, they must have each of the necessary components.

### Scoring:

The completion of any circuit is worth \$1000. However completing a Buzzer adds an extra \$500 in value, completing a Microphone adds an extra \$1000 in value, and completing an Air Conditioner adds an extra \$1500.

### Other Rules:

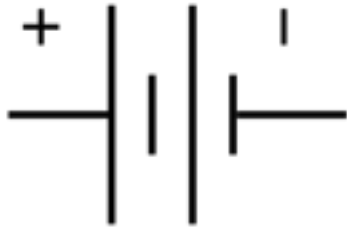
Activity Cards do not apply to Electrical Component Cards that have not been played.

When a circuit is complete, the Electrical Component Cards cannot be used to complete another circuit.

A player can build as many circuits as they want at the same time.

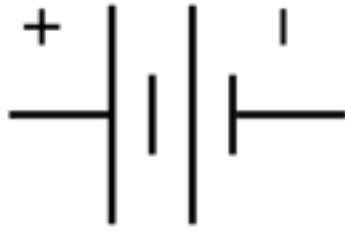
If you run out of cards in the draw pile, reshuffle the cards used for completed circuits and any Activity Cards that have already been used. A player may write out the circuits they have already completed so as not to forget how much money they have earned.

Battery



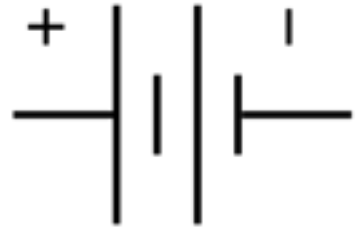
Battery

Battery



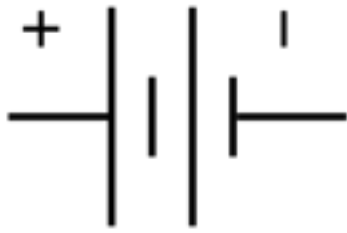
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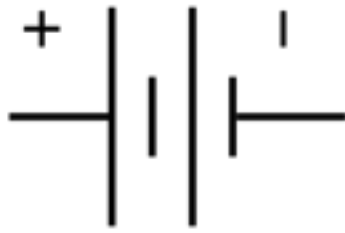
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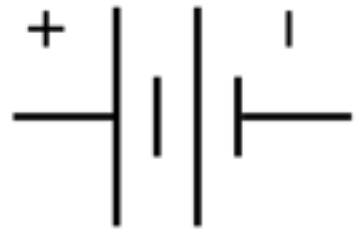
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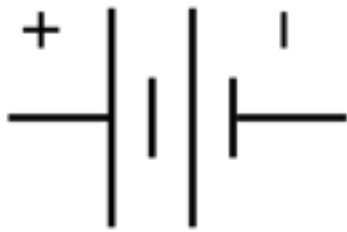
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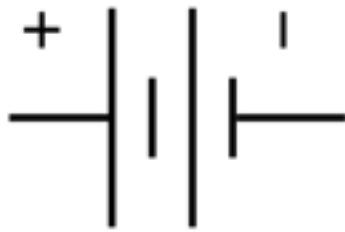
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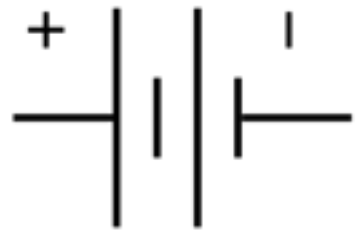
Battery

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Battery



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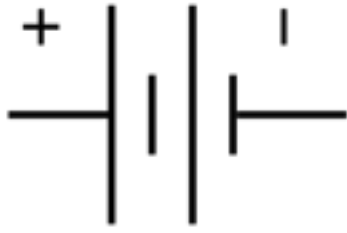
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Battery



Battery

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor

Resistor



Resistor



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Transistor



Transistor

Transistor



Transistor

Transistor



Transistor

Transistor



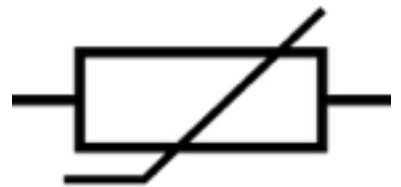
Transistor

Thermistor



Thermistor

Thermistor



Thermistor

Thermistor



Thermistor

Thermistor



Thermistor

Light Bulb



Light Bulb



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Light Bulb



Light Bulb

Switch



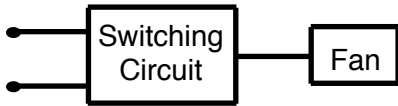
Switch

Switch



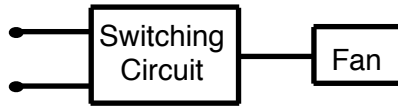
Switch

Switching Circuit



Switching Circuit

Switching Circuit



Switching Circuit

Transducer



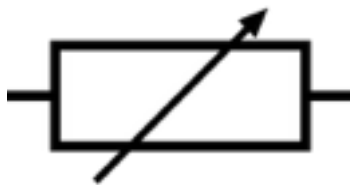
Transducer

Transducer



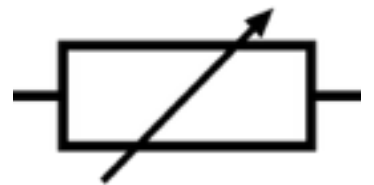
Transducer

Variable Resistor



Variable Resistor

Variable Resistor



Variable Resistor



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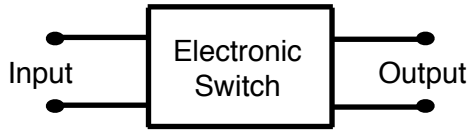
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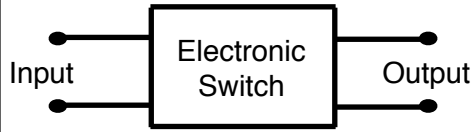
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Electronic Switch



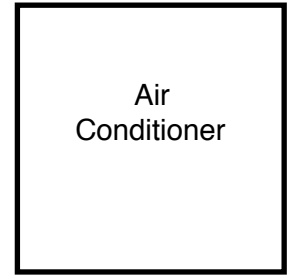
Electronic Switch

Electronic Switch



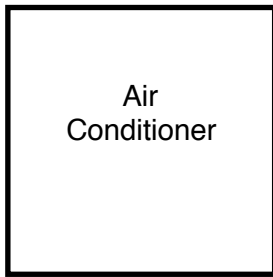
Electronic Switch

Air Conditioner



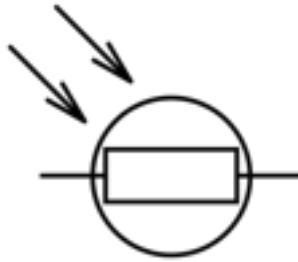
Air Conditioner

Air Conditioner



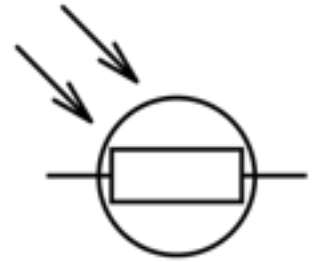
Air Conditioner

LDR



LDR

LDR



LDR

Buzzer



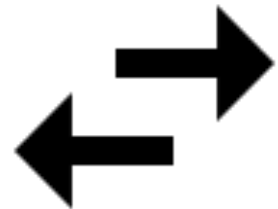
Buzzer

Buzzer



Buzzer

SWAP



Swap an Electrical Component Card with another player



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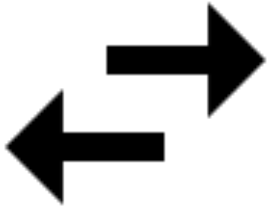
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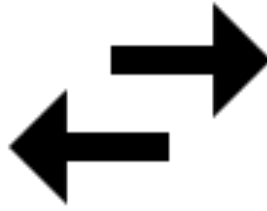
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SWAP



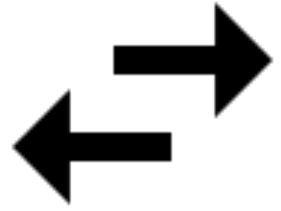
Swap an Electrical Component Card with another player

SWAP



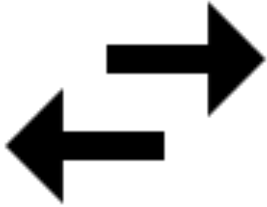
Swap an Electrical Component Card with another player

SWAP



Swap an Electrical Component Card with another player

SWAP



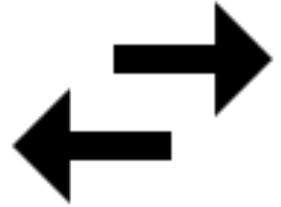
Swap an Electrical Component Card with another player

SWAP



Swap an Electrical Component Card with another player

SWAP



Swap an Electrical Component Card with another player

STEAL



Steal an Electrical Component card from an opponent

STEAL



Steal an Electrical Component card from an opponent

STEAL



Steal an Electrical Component card from an opponent



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STEAL



Steal an Electrical Component card from an opponent

STEAL



Steal an Electrical Component card from an opponent

STEAL



Steal an Electrical Component card from an opponent

STEAL



Steal an Electrical Component card from an opponent

BLOCK A STEAL



Block an opponent from stealing your card

BLOCK A STEAL



Block an opponent from stealing your card

BLOCK A STEAL



Block an opponent from stealing your card

BLOCK A STEAL



Block an opponent from stealing your card

BLOCK A STEAL



Block an opponent from stealing your card



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BLOCK A STEAL



Block an opponent  
from stealing your card

BLOCK A STEAL



Block an opponent  
from stealing your card



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