

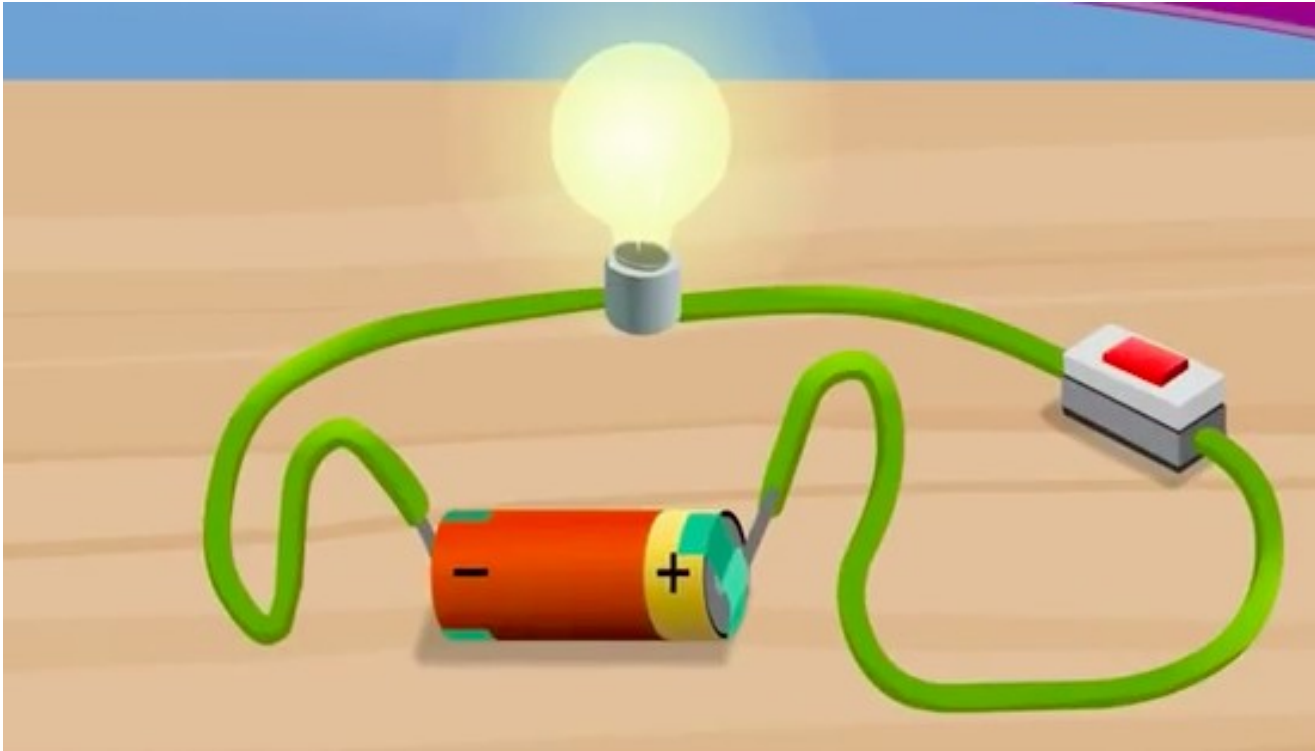


9DGT Course

# House Keeping

- Get to know the location of DGT resources: tools, equipments and electronic components that you are going to use in your DGT sessions.
- Know the pack-up procedure.
- Component storage is behind left side whiteboard – students do not access this unless they have teachers permission


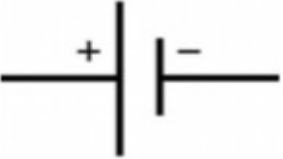




# Lets start with a simple electric circuit



- Click to watch

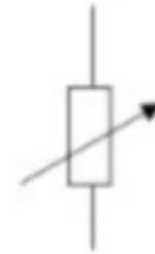
<https://www.youtube.com/watch?v=VnnpLaKsqGU&t=75s>

# Electronic components and their symbols

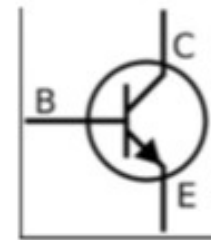
|   |              |   |
|---|--------------|---|
|    | cell         |    |
|   | Push Switch  |   |
|  | Slide Switch |  |



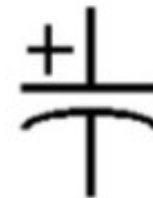
Potentiometer




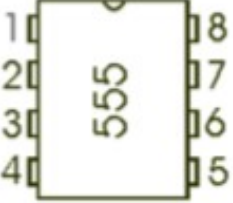

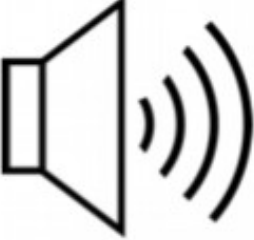

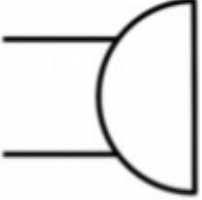
Transistor




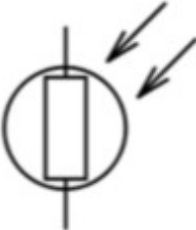



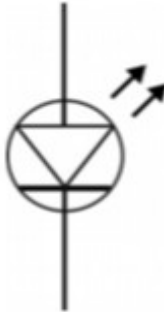


Electrolyte Capacitor



## Electronic Components – Symbols and names

| Image   | Component Name | Symbol  |
|---|----------------|---|
|    | 555 timer      |    |
|   | speaker        |   |
|  | buzzer         |  |

|   |                                   |   |
|---|-----------------------------------|---|
|     | <p>Fixed Value Resistor</p>       |    |
|    | <p>LDR</p>                        |    |
|   | <p>Non- Electrolyte Capacitor</p> |    |
|  | <p>LED</p>                        |  |

# BYOD

Each student must have a device?

Software and websites:

1- Begin by finding website – **Technology Student** – bookmark this page.

<http://www.technologystudent.com/index.htm> Then click on electronics

2- Visit <https://www.tinkercad.com/circuits> to design electronic circuits and then simulate to visualize the outcome.

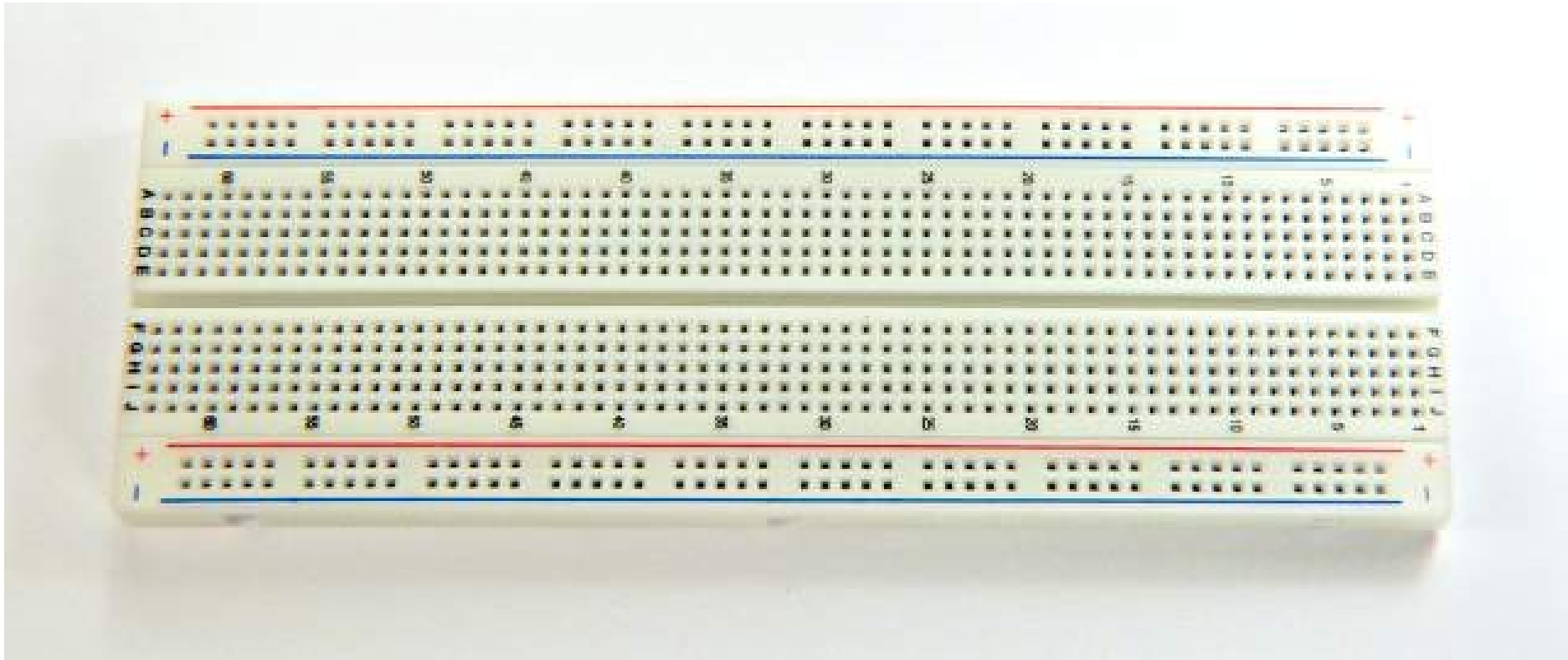


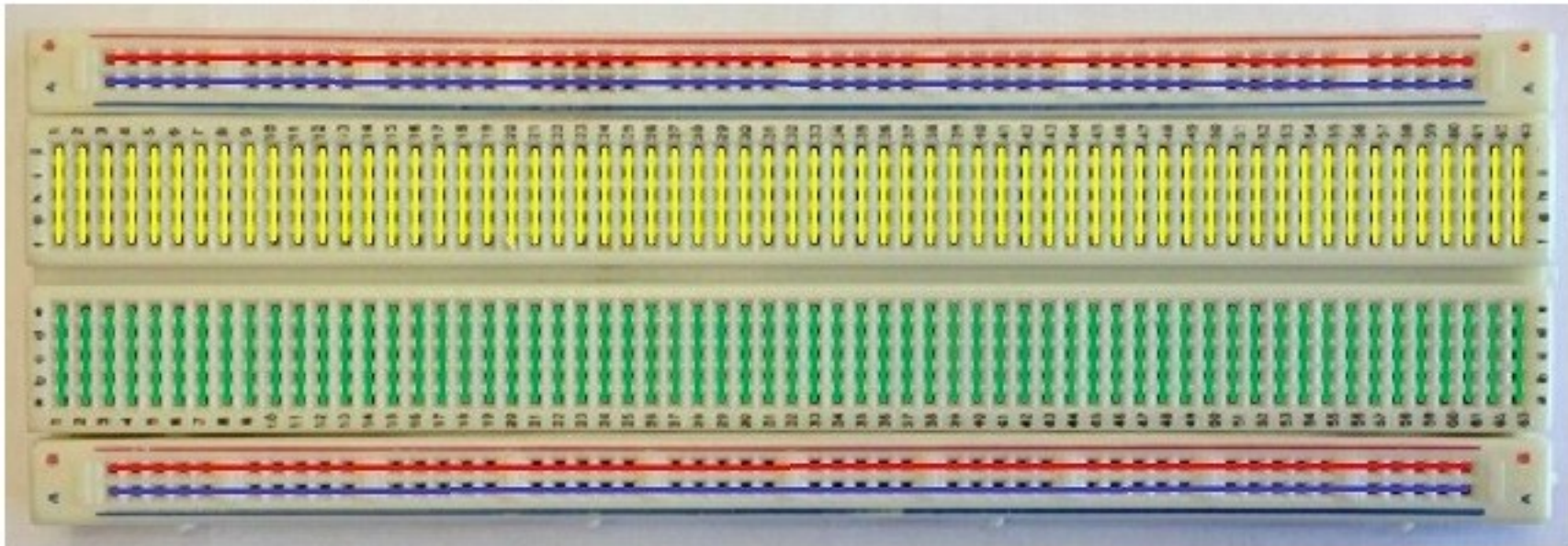
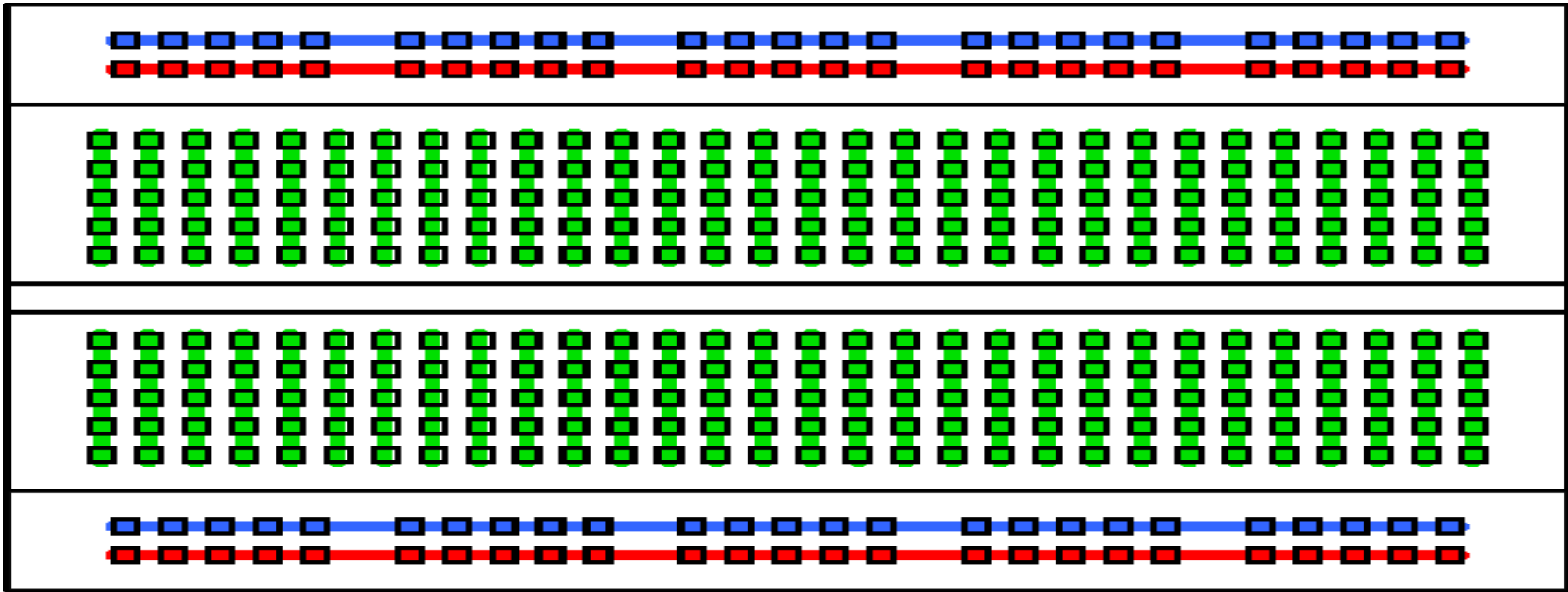
# Batteries LEDs and simple circuit

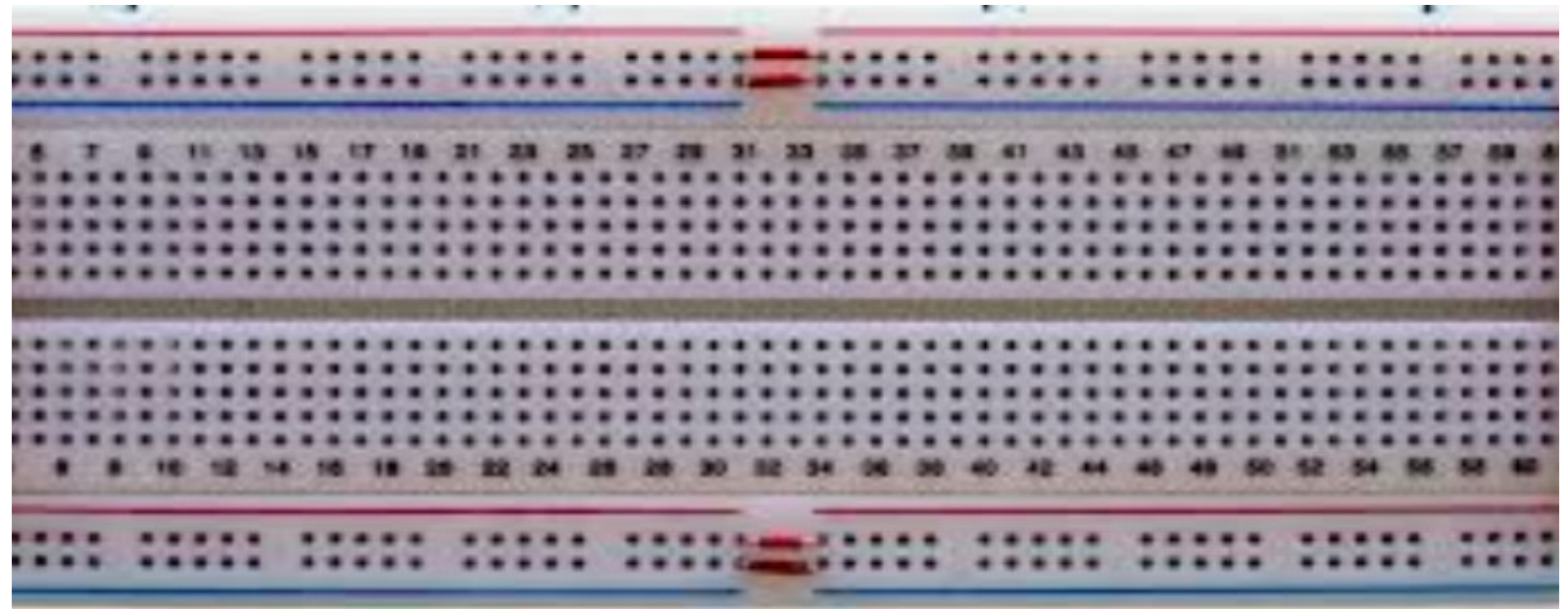
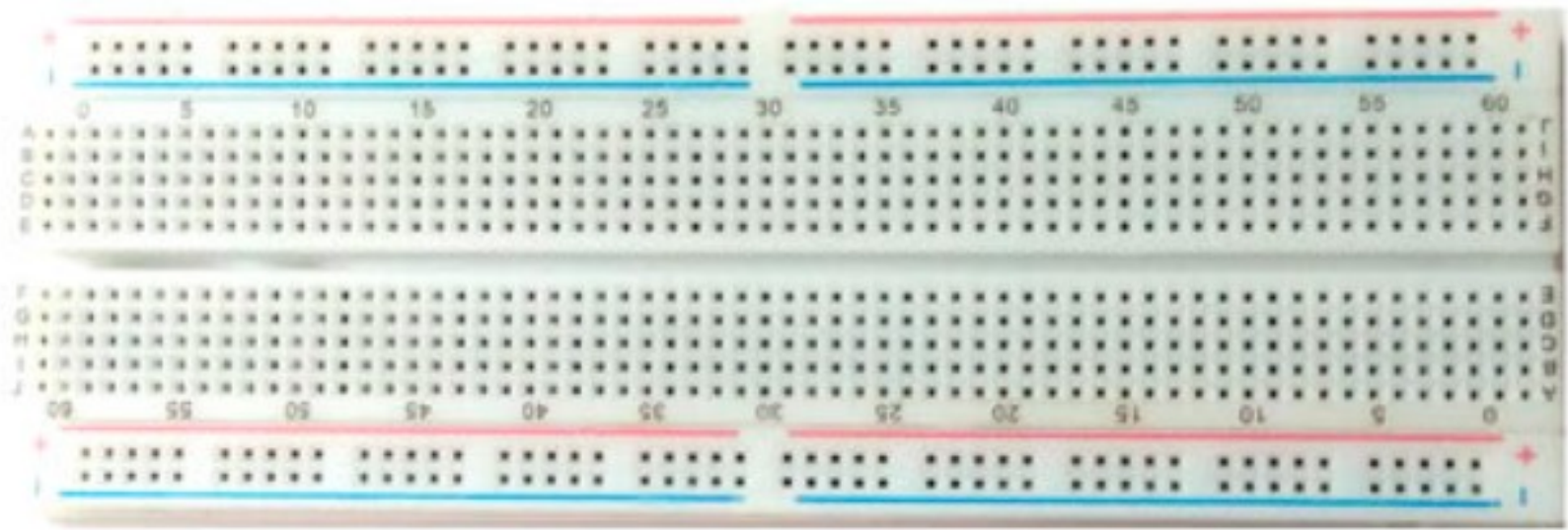
- <http://www.technologystudent.com/elec1/battery1.htm>

# Breadboards

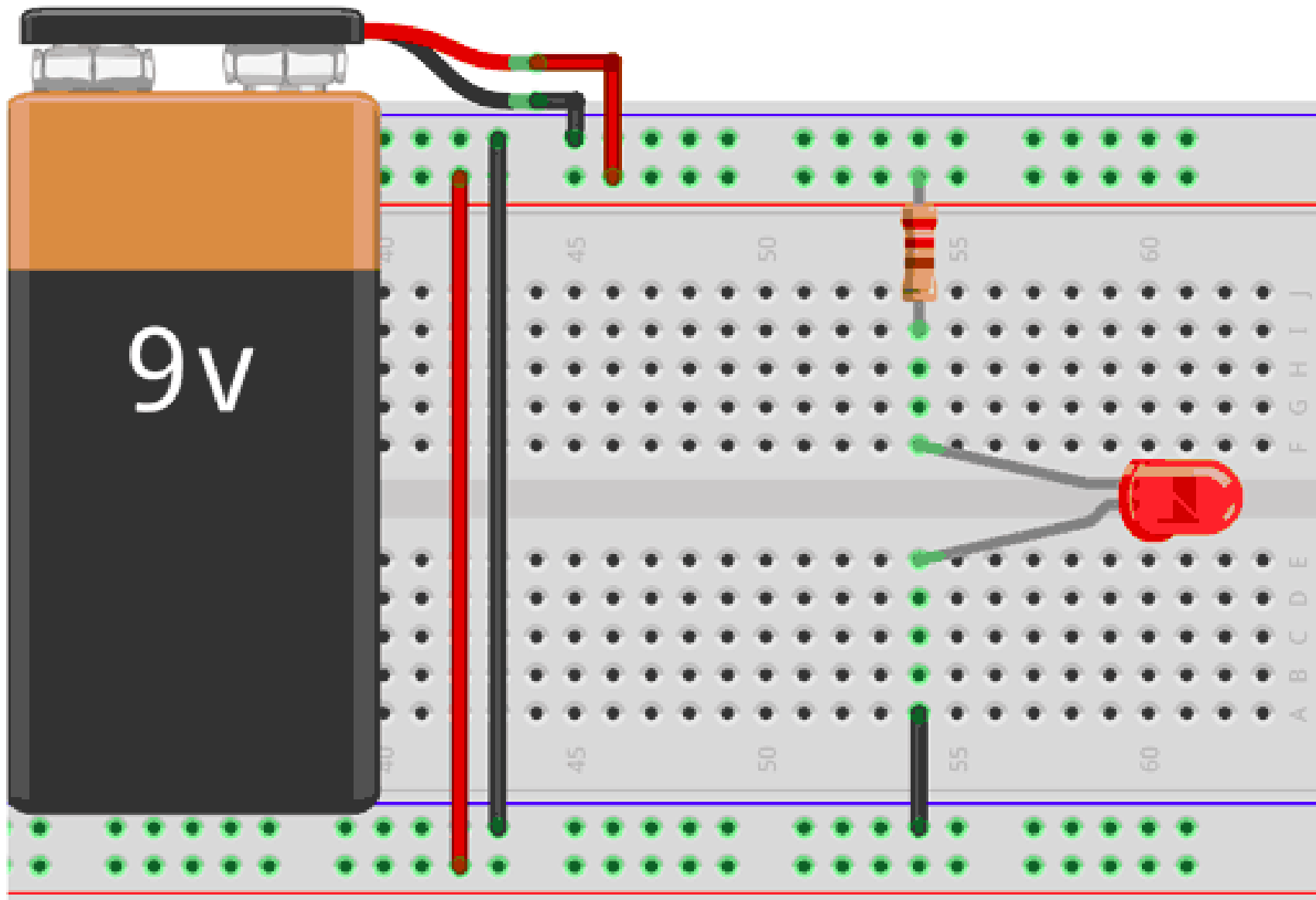
- <http://www.technologystudent.com/elec1/bread1.htm>







# Simple LED Circuit on Breadboard with 330 ohms resistor



# Teachers expectations:

- **Safety first (Listen – Understand - act)**
- Arrive to class on time.
- Work hard. Do not waste your time.
- Complete and hand in assignments on time
- Show respect and care for the school equipment, students and teachers