

Switch On, Switch Off

Pre-visit activity connection to the Nickelodeon PlayLab

Grade level: 4th grade NGSS 4-PS3-2, CCSS RI.4.3, W.4.2

Concepts:

Use of switches to open and close circuit

Materials needed:

1. Copy of the book " Switch On, Switch Off" by Melvin Berger and Carolyn Croll
2. Paper to collect data
3. Chart paper and color paper squares for gluing on the charts

Procedure:

1. Read the book to the class.
2. Conduct a "switch hunt" throughout the school.
3. Count the number of switches found in the classroom, the number of switches found in the hall and the number of switches found in the gym or other rooms.
4. Have the students create a bar graph to display their findings.

What's Happening:

An open circuit happens when the switch is turned off stopping the flow of the current. When the switch is turned on the circuit is closed and the current is allowed to flow.

Book List:

1. OSCAR and the BIRD by Geoff Waring
2. Excited about Electricity by Nadia Higgins

Extension Activities:

1. Students could create other types of graphs to display information.
2. The class could create a writing piece about the use of switches.
3. The students could draw pictures showing the use of switches.
4. Discuss electrical safety rules.