Title of Lesson: Series and Parallel Circuits
Theme: Physical Science
Unit Number: B    Unit Title: electricity and Magnetism

Performance Standard(s) Covered (enter codes):
S5P3

Enduring Standards (objectives of activity):
Habits of Mind
☒ Asks questions
☒ Uses numbers to quantify
☒ Works in a group
☒ Uses tools to measure and view
☒ Looks at how parts of things are needed
☒ Describes and compares using physical attributes
☒ Observes using senses
☒ Draws and describes observations

Content (key terms and topics covered):
Parallel Circuit, Series Circuit, Insulator, Conductor, Current

Learning Activity (Description in Steps)
Abstract (limit 100 characters): Students understand the difference between Parallel and Series Circuit

Details: Separate the necessary components per group into individual plastic baggies before the lesson. Hand one bag to each group of students (4-5 per group). Instruct the students to build a series circuit with no initial input (1 wire will not be used). They should be able to do this. Help individual groups as needed. Instruct the students to unscrew 1 lightbulb. After this task is completed, instruct the students to build a parallel circuit. After all groups have constructed a parallel circuit, then instruct the students to remove 1 bulb and keep the other one light. A proper parallel circuit should be able to demonstrate this. If time permits clip the plastic bag inbetween wire to act as an insulator.

Materials Needed (Type and Quantity):
Per Group: Wire (4), Light bulbs (2), Battery (D cell), Battery holder

Notes and Tips (suggested changes, alternative methods, cautions):
Start by asking the students to name common household series and parallel circuits. Also possible ask the students to make a hypothesis about a series circuit. Battery holder can be made with
paperclips taped to the side of the battery with part of the clip touching the electrodes. A minor safety concern is that the students may pinch their fingers with the alligator clips on the wire.

Sources/References:
1) Georgia HSP Science 5th Grade Textbook
2) 
3)