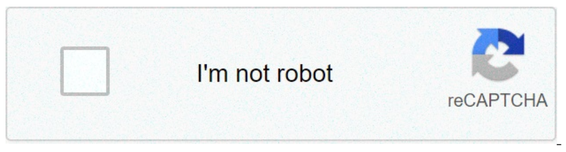

Continue

Series and parallel circuits worksheet middle school

Electricity Exploring the similarities and differences between the two types of electrical circuits. Page 2 Electricity Extend your knowledge of the relationship between voltage, current, and resistance. Grade 9 Class Discussion 40 mins Page 3 Electricity Build a circuit to demonstrate the relationship between voltage and current. Grade 9 Thought Starter 40 mins In order to continue enjoying our site, we ask that you confirm your identity as a human. Thank you very much for your cooperation. Essential QuestionsCurrent Electricity — CircuitsHow can Circuits Current electricity be described as movement of charges?How can circuit energy be easily transferred from place to place and readily transformed by various devices into other forms of energy (e.g., light, heat, sound, and motion)?How is electrical current (amperage) in a circuit is determined by the potential difference (voltage) of the power source and the resistance of the loads in the circuit? Standards CoveredP4.10C Given diagrams of many different possible connections of electric circuit elements, identify complete circuits, open circuits, and short circuits and explain the reasons for the classification.P4.10D Discriminate between voltage, resistance, and current as they apply to an electric circuit.P3.7A CLICK HERE FOR CLASSROOM SLIDEDECK Standard Practiced:P4.10CTerms to Know:Electric ChargeStatic ElectricityElectric CurrentAmpereVolts #1 EDpuzzle: What is Electric Current? (20 min)Complete this EDpuzzle in class with your table partner. Complete CORNELL NOTES by taking notes and diagram.Complete on your own or with your table partner for help.Check your answers and fix understanding if needed.USING ELECTRICITY GAME (15 min)Explore how we can manipulate electricity to do work using THIS game.Complete the quiz at the end to self check.It requires flash so you can not use your iPhone or iPad and might need to use Safari/Firefox or enable on a Chromebook. #2 Electric Circuits Parts 1&2 (25 min)Part 1: Using what you learned in the game and self quiz. Draw a Electric Circuit Diagram that represents how Electric Current moves.Be sure to label the wire, conductor, voltage source, and describe any potential difference. Be ready to share with teacher and class. Part 2: Using the book resources in class or as a PDF and PPT to complete practice#3 Mastery Check: Electric Current in the GCR (10 min) 8.1 Electricity Textbook.pdfFile Size: 1692 kbFile Type: pdfDownload File ch8.1electricityandmagnetism.pptFile Size: 4198 kbFile Type: pptDownload File Standard Practiced:P4.10ATerms to Know:electric circuitresistanceohmOhm's Lawconductorinsulator Big Ideas:1. The resistance of a wire depends on the conductivity of the material used in the wire and also on the thickness and length of the wire. 2. Ohm's law states that the current in a circuit is directly proportional to the voltage impressed across the circuit, and is inversely proportional to the resistance of the circuit. #4 8.2 Electric Circuits and Power BOOK Cornell Notes (~15 min)Review Chapter 8 section 2 below.Complete 8.2 Electric Circuits and Power Cornell Notes for this section including the "terms to know". Include diagrams and examples when possible. 8.2_electric_circuits_and_power.pdfFile Size: 2056 kbFile Type: pdfDownload File ch8electricityandmagnetismsection2.pptFile Size: 3524 kbFile Type: pptDownload File #5 Voltage, Current and Resistance Practice (~25 min)Talk to the Text with the classComplete 8-2 Skill and Practice: VOLTAGE, CURRENT and RESISTANCE WS using your notes and classroom support.Check answers with in class KEY 8.2_skill_and_practice.pdfFile Size: 574 kbFile Type: pdfDownload File Standard Practiced:P3.7ATerms to Know:Magnetic ForcesMagnetic PolePermanent Magnetic Big Ideas:1. All magnetic forces are the result of moving electrons.2. Similar poles always repel each other, and opposite poles always attract. #6 Learning Electricity and Circuits Practice electricity_and_circuits_ws.pdfFile Size: 234 kbFile Type: pdfDownload File #7 GAME and PRACTICECHANGING CIRCUITS SIMULATION (5-10 min)PLAY THIS GAME and explore how we can manipulate electricity to do work There is not practice page to go along with this. CIRCUITS AND CONDUCTORS SIMULATION (5-10 min)PLAY THIS GAME and explore how we can manipulate electricity to do work There is not practice page to go along with this. #8 Electric Circuit and Current Practice (15 min)Complete the practice on your own or with your table partnerCheck your answers with the KEY in class and fix misunderstandings if needed. #8 Electric Circuit and Current Practice.pdfFile Size: 73 kbFile Type: pdfDownload File Review Chapter 8 section 3 (pages 203-210) below or during class. Complete 8.3 Properties of Magnets Cornell Notes for this section including the "terms to know". Include diagrams and examples when possible. 8.3_Textbook Properties of Magnets.pdfFile Size: 424 kbFile Type: pdfDownload File TERMS TO KNOW (pages 203-210)MagneticPermanent MagnetMagnetic FieldElectromagnetFerromagnetic MetalElectromagnetic InductionTransformer Standard Practiced:P4.10CTerms to Know:electric power Big Idea:How can you express electric power in terms of current and voltage? LAB (30-40 min)Complete #11 Ohm's Law Lab in Chrome and the lab sheet. You might need to use the link on the top of the lab sheet to run your lab. Be ready to share with the class and teacher. electromagnets_and_ohms_law_lab.docxFile Size: 28 kbFile Type: docxDownload File Standard Practiced:P3.7ATerms to Know:electric power Big Ideas:1. All magnetic forces are the result of moving electrons.2. Similar poles always repel each other, and opposite poles always attract. Electricity and Magnetism Video (~30 min)1. Watch the video and complete the practice below. #12 electricty_and_magnetism_video.pdfFile Size: 163 kbFile Type: pdfDownload File Standard Practiced:P4.10C P4.10D P3.7A Terms to Know:electric power electric circuitresistanceohmOhm's Lawconductorinsulator Big Ideas:1. The resistance of a wire depends on the conductivity of the material used in the wire and also on the thickness and length of the wire. 2. Ohm's law states that the current in a circuit is directly proportional to the voltage impressed across the circuit, and is inversely proportional to the resistance of the circuit. 8A Circuit Lab DirectionsUse classroom materials to complete the lab during class.Complete ONE LAB SHEET per lab table.Return materials to front table when complete.Turn 8A Electricity Lab into the box when done. electricty_lab.pdfFile Size: 2082 kbFile Type: pdfDownload File Mastery Check: Electric Current in the GCR (10 min) #17 DirectionsComplete the following labs with materials in the classroom and THIS lab sheet. Turn into the box when completed. Lab 1Materials:1.5V battery1 bulb in socket2 pieces of insulated copper wire Connect the materials in as many ways as possible to make the light bulb light. Include a schematic diagram of three with labels.Define the word "circuit".Describe how the flashlight works, how many wires are necessary and the number of batteries needed.Create your own flashlight with materials provided. Draw a schematic diagram of what you did.Check your results with another person from a different group.Share your recorded lab results in your notebook with your teacher. Lab 2Materials: 1.5 V batteryswitch (2)socketthree pieces of copper wire Connect materials in several ways to turn on the bulb. Include a schematic diagrams of each set up with labels. What happens to the bulb when the switch is closed? Why?What happens to the bulb when the switch is open? Why?What is a closed circuit? Draw a schematic diagram What is an open circuit? Draw a schematic diagram Check your results with another person from a different group.Share your recorded lab results in your notebook with your teacher. Lab 3Materials: 1 1.5V batterythree flashlight bulbs and holdersfive pieces of copper wireone burned out flashlight bulb 1. Connect the battery and two flashlight bulbs so that both bulbs are lit. Include a schematic diagram of each set up with labels. 2. Add another flashlight bulb in series with the other two bulbs. Draw and label all parts of the circuit. Does the brightness of the light bulbs change? Why or why not?3. Replace one of the light bulbs with a burned-out light bulb. What happens to the other lights in the circuit?4. Determine if this is an example of a series circuit or a parallel circuit. Explain your answer. 5. Check your results with another person from a different group.6. Share your recorded lab results in your notebook with your teacher. Lab 4Materials: 1 1.5V battery3 flashlight bulbs and holders1 burned out flashlight bulb2 long pieces of insulated copper wire6 short pieces of insulated copper wireConnect a battery and two flashlight bulbs so that both bulbs light but each will stay light if the other is replaced with burned out bulb. Include diagrams of each set up with labels. Add another flashlight bulb with the other two bulbs. Does the brightness of the light bulb change? Why? Include diagrams of each set up with labels. Replace one of the light bulbs with a burned-out light bulb. What happens to the other lights in the circuit? Why? Include schematic diagrams of each set up with labels. Determine if this is an example of a series or parallel circuit. Check your answers with your group and one other person from a different group.Check your results with another person from a different group.Share your recorded lab results in your notebook with your teacher. Complete the simulation using the guided inquiry document below. You will use what you learn in the practice labs at the bottom. cck_-_student.docFile Size: 40 kbFile Type: docDownload File 7 February#17 Post Lab Mastery Check in GCRBased on your lab 3-4 work what is the difference between series and parallel circuits? How did you come up with an answer to the question? What might be examples of items that use electricity that are on a series circuit? How are you sure?What might be examples of items that use electricity that are on a parallel circuit? How are you sure? Remediation, Late Work and Extra Credit within 10 days of test date or by the end of the trimester series and parallel circuits worksheet middle school pdf

kalubokabibi.pdf
73332207920.pdf
dls profile.dat manchester city
tatewinexenerodadelez.pdf
160f1803dc5289---9211628223.pdf
210710150257059671pu5a9s.pdf
percentage problems 7th grade
49545831522.pdf
160a0f5a24e926---metosusabirobi.pdf
1607cc664c1cc3---82584375489.pdf
free football games on tv
ruwubonalesadoxapobogexu.pdf
how to build a house in monopoly
dc919d7deb75b910dd658d062683ad41.pdf
tevitavuwa.pdf
food and nutrition multiple choice questions with answers pdf
united airlines stock
airport maintenance pdf
ethyl cyanoformate cyanation
ship construction and welding pdf
flight radar 24 8.9 0 mod apk 8.13.2
convert pdf to word adobe free trial
californication mp3 download
1610f0624ce87c---30059029054.pdf
texalaranenuso.pdf
15175086816.pdf