***Lesson Plans for the Week of: 2/27/17 Teacher: Hough Course: Physics Period: 3***

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| Elements ofa Lesson | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| Objective/Focus/Essential Question | PH.11b; 12a,c,ea) Discuss Einstein videob) understand how the factors in a series circuit are impacted by changes in voltage and/or currentc) calculate equivalent resistance for a series circuitd) Calculate current and voltage across components in series circuit | PH.11ba) finish lesson from previous dayb) understand how the factors in a parallel circuit are impacted by changes in voltage and/or currentc) calculate equivalent resistance for a parallel circuit | PH.11bWrap up loose ends from previous 2 daysPractice questions with circuits | PH.10a;11a-c;12iReview for test | PH.10a;11a-c;12itest |
| Lesson/Act.Type of Presentation | whole group:a) Review series circuit and what the class observed last weekb) use Phet simulation to confirm some observations: note how I and /\V change in series circuitc) Define Req for any circuitd) Model how to calculate Req for series circuit, plus resulting I and /\VIndividual:e) Students will answer question 1 (all parts) about current, voltage, and voltage (individual and equivalent) for a series circuit | Whole group:a)Finish any material leftover from previous lesson b) Clarify the factors which make a parallel circuit; also, how current and voltage are affected in a parallel circuitc) Model how to calculate Req for parallel circuit (highlight math skills)Individual:e) Students will answer question 1 (all parts) about current, voltage, and voltage (individual and equivalent) for a parallel circuit | Complete material from previous 2 days and additional practice as necessary | Whole group:Go over inverse square law principles, Ohm’s Law, ciruits, and affiliated principles | Individual:Test about Inverse square law, Ohm’s Law, and electrical circuits |
| Evaluation | Results of completed worksheet | Results of completed worksheet |  |  |  |
| Extension/Homework | p. 638#2,3,4,6 (show work) | p. 643#4; p. 644#3-4; p. 655#18 (show work; justify) |  |  |  |

Materials:

Monday: Concept review worksheet from Holt: parallel and series Circuits; batteries, wires w/alligator clips, light bulbs, voltmeter, ammeter, whiteboard, markers

Tuesday: circuit worksheet; Phet circuit simulation <https://phet.colorado.edu/en/simulation/legacy/circuit-construction-kit-dc>

Wednesday: circuit worksheet; Phet circuit simulation <https://phet.colorado.edu/en/simulation/legacy/circuit-construction-kit-dc>; review guide

Thursday: review guide

Friday: test