***Lesson Plans for the Week of: 1/23/17 Teacher: Hough Course: Physical Science Period: 1,2,7/8***

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| Elements of  a Lesson | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| Objective/  Focus/  Essential  Question | PS.1e  Students will practice converting values into scientific notation  Review planets | PS.1i;2b,e,f;5b  Review for test | PS.1i;2b,e,f;5b  --Test | PS.10a  --Understand speed and velocity  --differentiate between speed and velocity | PS.1b,d,h;10a  Calculate speed, velocity  2 groups: buggy, calculate |
| Lesson/Act.  Type of Presentation | Individual:  Bellwork: Balance a chemical equation  Whole Group:  Go over answer to bellwork  Review planets; note distances from sun to planets  Review how to convert between scientific notation and conventional notation;  Demonstrate  Whole group:  Guided practice with scientific notation  Independent practice with scientific notation  Demonstrate how pH is affected by mixing substances with widely different pH | Individual:  Bellwork: a) ID balanced chemical reaction; b) balance a chemical reaction  Whole group:  Demonstration as review: take pH of HCl and NaOH each, then mix equal parts. Take the pH of each. Try mixing unequal parts and see what happens to  Go over review sheet correct answers | Individual:  Test | Whole Group:  a) warm up: inquires about how we tell how quickly objects move  b) Notes SI units for distance (spiral from earlier in the year), define speed and velocity  c) SI units for each, but use car speed as example  Individual:  d) Students will answer questions differentiating between speeds and velocities | Class will be broken into 2 groups:  1) Individual: One group will practice calculating speed and velocity—teacher-made problems  2) Individual: One group will measure the distance between two pieces of tape, and then measure the time it takes the buggy to travel between the two pieces of tape—measure 3 trials, calculate the 3 speeds, the average speed, and the range of speeds.  Groups trade places  Differentiation: the groups are largely grouped by ability |
| Evaluation | Results from assigned worksheet |  |  | Results of classwork | Student worksheets |
| Extension/  Homework |  |  |  | no homework |  |
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MATERIALS:

Monday: Science World worksheet, teacher made worksheet, review guide; investigate Phet Moving man simulation

Tuesday: Teacher-made study guide; indicator; hydrochloric acid; sodium hydroxide;whiteboard, marker

Wednesday: Teacher made test

Thursday: Notes with work

Friday: buggies, meter sticks, timers