# 8<sup>th</sup> Grade Science Syllabus Kearns-Saint Ann Catholic School



430 East 2100 South Salt Lake City, Utah 84115 **Phone: 801-486-7741** 

Instructor: Mr. VanWagoner Email: <u>jvanwagoner@ksaschool.org</u> Class Website: <u>www.ksascience.weebly.com</u>

**Course description:** In this course students will learn about the forces of energy in our lives. We will explore and classify electricity, magnetism, motion, forces and energy. Students will learn to study these areas by utilizing the scientific methods, vocabulary, classroom discussions and online resources. Students will also have many hands-on experiences to aide in the learning experience such as labs, experiments and online resources.

## Materials needed:

- 1. Pencils (mechanical preferred)
- 2. Pens (blue, black and red)
- 3. Binder w/college rule paper
- 4. HiLiters

## Subject matter to be covered:

- 1. Electrical charge, current and circuits
- 2. What is magnetism
- 3. Electricity and magnetism
- 4. Electronics
- 5. Compuiters
- 6. What is Motion?
- 7. Acceleration and Momentum
- 8. Newton's 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> laws
- 9. Pressure
- 10. Why do objects float?
- 11. Doing work with fluids

- 12. Work with power
- 13. Using Machines
- 14. What is Energy?
- 15. Energy transformation and sources
- 16. Temperatures and thermal energy
- 17. Heat, engines and refridgerators

**Expectations:** Students will come prepared and be on time for class every day. They will work cooperatively and respectfully. Students will follow teacher expectations in classroom/lab and expectations in safety agreement. School policy will be followed regarding passes. Remember that passes are a privilege not a right. Violations of these rules will result in consequences.

Consequences will be one of the following dependent upon the violation:

- Φ Verbal warning
- $\Phi$  Written note signed by student and parent(s)
- $\Phi$  Phone call home
- Φ Parent/Teacher/Student Conference
- $\Phi$  Detention with teacher or in-house
- $\Phi$  Office Referral

## Grading:

50% of grade is tests/quizzes/projects 30% of grade is daily work/homework 15% of grade is lab write-ups 5% of grade is class participation

**Late Work:** Must be turned in within one week of the end of the unit. Maximum of 70% credit on the late assignment can be earned.

**Homework:** Answer the questions in complete sentences when appropriate. Assignments are to be completed neatly as possible. If I cannot easily decipher the answers, you will be asked to redo the assignment in order to receive credit. The due date for each assignment will be announced in class.

Upon returning to school following an absence, it is the student's responsibility to contact the teacher to request make-up work. The student is allotted two extra days per one day absent to complete work and turn it in. Labs must be made up on the designated "lab make-up day". If the lab is not made up at this time, the student will receive a zero for the designated lab.

**Knew/New/Q:** Students will take notes in class utilizing the "Knew/New/Q" method. This is basically a sheet of paper divided into 3 columns. The 1<sup>st</sup> column is for information the student knows, the 2<sup>nd</sup> column is for new information the student has learned and the final

column is an area where students can write down questions they may have regarding the subject matter.

**Science Fair**: All students are required to participate in the school science fair. Each student will be given instructions and handouts during science class for the various steps of the project. Most of the work will be completed at home.

Parents should encourage and monitor his or her child's progress on the way. Parent support is key to a successful project, but please do not allow the involvement to extend any further than that. This assures equity and promotes student learning. It is important that your child wrestles with problems and try to solve them. Guide your child whenever and wherever you can, but let the final project reflect your child's individual effort and design.

### **Science Laboratory Safety Rules**

1. Goggles and aprons must be worn for labs as needed.

2. No eating, drinking, or chewing in the lab area.

3. No horseplay of any kind during a lab.

4. You will bel advised on methods of disposal of chemicals used in the lab exercises.

5. Should you get chemicals in your eyes immediately notify your teacher and flood your eyes with water using the eyewash station.

6. If you spill chemicals on your skin, rinse the area immediately with water from the nearest sink.

7. Unplug all electrical equipment and turn off the water when not in use.

8. Clean up your assigned lab work area. Empty the sink of any debris. Have your teacher sign off your lab sheet before you leave the lab area.

9. Report accidents immediately to your teacher.

10. Follow your teacher's directions during an emergency situation.

I have read the attached course syllabus and Science lab safety rules. I have been present when they were discussed in class or I have discussed them directly with my science teacher.

I have read and discussed the course syllabus including the Science lab safety rules with my student.

 date:

These two signatures are worth 10 points and are due August 29th