

Riverdale Kingsbridge Academy
Lori O'Mara, Principal
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6th Grade General Science Syllabus

Instructor: Dr. Rodriguez

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Course Description:

This is a sixth grade science class and we will be studying the movement of energy through various systems. In particular, we will take closer look at how machines impact our lives from a WORK perspective and our role in maintaining a balance ecosystem. We will also study how matter and energy interact to produce weather patterns.

A typical lesson will include discussions, demonstrations, hands-on and laboratory activities. We will be using Foss Kits which will be supplemented by our lab specialist.

Course Outline:

Enduring Understandings:

- Energy cannot be created or destroyed. It can only change from one form to another.
- Machines can change the direction or amount of force, or the distance or speed of force required to do work.
- Substances have characteristic properties that include density, heat, boiling and freezing points.
- Living things are composed of cells, which provide structure and carry on major functions to sustain life.
- All organisms require energy to survive.

Units and Essential Questions:

Unit 1: Simple and Complex Machines

- How does energy play a role in our lives? How do machines impact our lives?
 - Energy
 - Machines
 - Energy Transformations
 - Work
 - Friction

Unit 2: Weather

- How do matter and energy interact to produce weather patterns?
 - Properties of Matter
 - Heating and Cooling Events
 - Weather

Unit 3: Diversity of Life: Populations

- How does the transfer of matter and energy through biological communities support diversity of living things?
 - Kingdoms of Life
 - Food Chains and Food Webs

Unit 4: Interdependence: Ecosystems

- How is interdependence essential in maintaining life on Earth?
- In ecosystems, balance is the result of interactions between community members and their environments.

- Climate and Biomes
- Ecosystems
- Interdependence
- Adaptations for Survival

Course Expectations:

Be Prepared:

- You must be prepared with something to write on and something to write with. Again, any deviation from this will be followed up by a parent phone call or a referral to the dean.
- You must have a science section clearly defined in your loose-leaf binder or notebook
- You are responsible for having your binder, two pens, and two pencils in class daily.

Classroom Expectations

- Go directly to your assigned seats. If you are late, you must sign the late log. Late log entries will be followed up by a parent phone call or a referral to the dean.
- Open your binder to the science section, and copy the Aim, Homework and begin the Do Now.
- All lessons must be numbered, dated, properly ordered and the aim clearly defined.
- Students are encouraged to participate in class discussions to the best of their ability.
- Complete and neat notes taken during classroom lessons.
- You will be assigned homework daily. Assignments will not be accepted if they are submitted more than three days after their due date as per school policy.
- Notebooks will be considered an essential component in determining subject grade.
- All students are expected to make up their assignments in the event of absence.

Use of Bathroom:

- You will be allowed to use the bathroom between 10 minutes after the late bell sounds and 10 minutes before the end of the period.
- Before leaving the room, you must first obtain a bathroom pass then sign the bathroom log.

Before leaving the classroom/Lab:

- Be sure to turn in all assignments
- Clear your tables of trash/mess
- Return the books to their storage place.
- Return all other materials you used during the session.
- Pick up all your trash off the floor and dispose of it in the trash bin.

Assessments:

Subject examinations

Laboratory reports

Research projects

Notebook evaluation

Homework assignments

Class participation

Jupitergrades:

- Jupitergrades is our online grading system that allows students' to monitor their progress throughout the school year. It is highly recommended that parents/students logon to Jupitergrades periodically to monitor progress. Information on how to access Jupitergrades will be given to you during the first week of classes.

Grading Policy for 6th Grade Science:

- 1. Exams: 50 %
- 2. Projects/Lab Reports: 20 %
- 3. Quizzes: 10 %
- 4. Homework: 10 %
- 5. Class work/Class Participation: 5%
- 6. Notebook: 5%

For additional information please refer to our website at rka141.org

PLEASE RETURN THIS PORTION TO YOUR TEACHER

I have read the attached course outline, goals, expectations, and evaluation criteria for Grade 6 Science and have discussed these requirements and responsibilities with my parents/guardians.

Student Signature _____ Date _____ Class _____

Parent/Guardian Signature _____ Email _____ Phone Number: _____