

**RTR Elementary School -2016**  
**Grade 4 Science Standards**

**The Nature of Science and Engineering**

1. Students will be able to describe the positive and negative impacts of the designed world on the natural world.
2. Students will be able to identify and investigate a design solution and describe how it was used to solve an everyday problem. *For example: Investigate different varieties of construction tools.*
3. Students will be able to design, build, test, and evaluate a problem solving engineering idea and communicate the results effectively. *e.g. electromagnet*
4. Students will be able to describe a situation in which one invention led to other inventions.

**Physical Science**

1. Students will be able to measure using appropriate tools and units.
2. Students will be able to distinguish between solids, liquids, and gases and describe how states of matter change.
3. Students will be able to describe the transfer of heat energy.
4. Students will be able to describe how magnets can repel or attract.
5. Students will be able to compare conductors and insulators.
6. Students will be able to identify ways to make heat energy.
7. Students will be able to construct a simple electrical circuit using wires, batteries, and light bulbs.
8. Students will be able to demonstrate how an electric current can produce a magnetic force.

**Earth Science**

1. Students will be able to recognize that rocks may be uniform or made of mixtures of different minerals.
2. Students will be able to describe and classify minerals based on their physical properties.
3. *e.g. streak, luster, hardness, reaction to vinegar*
4. Students will be able to describe the water cycle.
5. Students will be able to describe how water is used in a community.

**Life Science**

1. Students will be able to describe the defenses of the body against germs.
2. Students will be able to give examples of diseases that can be prevented by vaccinations.