

Science Curriculum - Fourth Grade

Capital's science curriculum is aligned with state and national standards. Teachers utilize researchbased materials and strategies to provide all students with experiences in the life, earth, and physical sciences while developing critical thinking and problem-solving skills. Students will develop an understanding of important science concepts as they demonstrate process skills such as observing, measuring, predicting, and communicating. The science curriculum engages students in hands-on, inquiry-based, integrated units which serve as a foundation for success in an increasingly-complex scientific and technological world.

This year your child's curriculum will include the following:

Cycle One: Structures of Life

- How does structure relate to function in living systems?
- How do responses to internal and external cues aid in an organism's survival?
- How do organisms change as they go through their life cycles?
- How does an organism depend on its basic needs for its survival and growth?

Cycle Two: Magnetism & Electricity

- Explain what is needed to complete a simple circuit and why?
- Describe and explain the path of electricity through a given circuit.
- What happens to a light bulb when connected to a complete circuit and explain why?
- Given metallic and non-metallic objects, explain which you would use to complete a circuit and why?
- How is the flow of electricity the same and different in a series versus parallel circuit? How would you tell?
- Given certain materials, how would you classify them as magnetic/non-magnetic?

Cycle Three: Land & Water

- How does understanding the properties of Earth materials and the physical laws that govern their behavior lead to prediction of Earth events?
- How do changes in one part of Earth systems affect other parts of the system?
- In what ways can Earth's processes be explained as interactions among cycles?
- How do the systems interact and allow us to explain observations or events and make predictions?
- How does human interaction affect changes in the landscape?
- How can we use a model to predict nature?
- How does the water cycle affect the land?
- How would land shape and soil composition affect how the land can be used?
- How would land shape and soil composition affect erosion?

For more information about your child's Science curriculum, please contact your child's teacher or call the Curriculum Office at 857-4228.