



Science Curriculum – Second Grade

Capital's science curriculum is aligned with state and national standards. Teachers utilize research-based 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: Insects

- What are some similarities and differences in the larvae, pupae, and adults of insects that go through metamorphosis (complete or incomplete)?
- What are the behaviors of insects at different stages of their life cycle?
- How do specific structures aid in the survival of insects throughout their life cycle?
- How are insect life cycles related to the life cycles of other living organisms?

Cycle Two: EIE Bridges

- What are technologies and who designs them?
- What are some problems, criteria, constraints, and solutions associated with designing bridges?
- What are some of the forces that act on structures and how do civil engineers design structures that can withstand these forces?
- How does the structure of a bridge affect its strength and how can we use different materials in our bridge designs?
- How can we use our knowledge of materials and their properties, different bridge types, and the engineering design process to design a strong, stable bridge?

Cycle Three: Soils

- How do worms enhance the decomposition of plant material in composting?
- What simple tests can be conducted to identify the three basic components of soil (sand, clay, humus)?
- How can the components of soil be compared/contrasted?
- How can soil composition affect water retention and plant growth?

- What tools or technology can you use to analyze soil samples?

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