HENRY COUNTY SCHOOLS

Better Together.





2ND GRADE

| SCIENCE |

HENRY

Teaching & Learning Standards

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Science

2nd Grade

Collaboration, Communication, Creativity, and Critical Thinking skills are embedded within the language of the Henry Teaching and Learning Standards

HCS Graduate Learner Outcome	***As a Henry County graduate, I will understand and analyze the origins of the solar system and its position in the universe through scientific and engineering practices.***

GA Standard Code

S2E1 **Obtain, evaluate, and communicate information about stars having different sizes and brightness.**

- S2E1a Ask questions to describe the physical attributes (size and brightness) of stars.
- S2E1b Construct an argument to support the claim that although the sun appears to be the brightest and largest star, it is actually medium in size and brightness.

S2E2 **Obtain, evaluate, and communicate information to develop an understanding of the patterns of the sun and the moon and the sun's effect on Earth.**

- S2E2a Plan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the day.
- S2E2b Design and build a structure that demonstrates how shadows change throughout the day.
- S2E2c Represent data in tables and/or graphs of the length of the day and night to recognize the change in seasons.
- S2E2d Use data from personal observations to describe, illustrate, and predict how the appearance of the moon changes over time in a pattern.

HCS Graduate Learner Outcome	***As a Henry County graduate, I will apply science and engineering practices to understand and analyze lithospheric materials, tectonic processes, and the human and environmental impacts of natural and human-induced changes to Earth's surface.***

GA Standard Code

S2E3 **Obtain, evaluate, and communicate information about how weather, plants, animals, and humans cause changes to the environment.**

- S2E3a Ask questions to obtain information about major changes to the environment in your community.
- S2E3b Construct an explanation of the causes and effects of a change to the environment in your community.

HCS Graduate Learner Outcome	***As a Henry County graduate, I will apply scientific and engineering practices to understand and analyze the structural similarities of organisms and how they can be compared scientifically.***

GA Standard Code

S2L1 **Obtain, evaluate, and communicate information about the life cycles of different living organisms.**

- S2L1a Ask questions to determine the sequence of the life cycle of common animals in your area: a mammal such as a cat, dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.
- S2L1b Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time.
- S2L1c Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants.
- S2L1d Develop models to illustrate the unique and diverse life cycles of organisms other than humans.

HCS Graduate Learner Outcome	***As a Henry County graduate, I will understand and analyze atoms, matter, reactions, and interactions through scientific processes and practices.***

GA Standard Code

S2P1 **Obtain, evaluate, and communicate information about the properties of matter and changes that occur in objects.**

- S2P1a Ask questions to describe and classify different objects according to their physical properties.
- S2P1b Construct an explanation for how structures made from small pieces (linking cubes, building blocks) can be disassembled and then rearranged to make new and different structures.
- S2P1c Provide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible.

HCS Graduate Learner Outcome	***As a Henry County graduate, I will understand and analyze forces, mass, motion, and interactions through scientific processes and practices.***

GA Standard Code

S2P2 **Obtain, evaluate, and communicate information to explain the effect of a force (a push or a pull) in the movement of an object (changes in speed and direction).**

- S2P2a Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object.
- S2P2b Design a device to change the speed or direction of an object.
- S2P2c Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).