The following Virginia Standards of Learning are met in our school group tours. If you have specific requirements or ideas for additional SOLs for your tour, please let us know at farmer@greatcountryfarms.com.

**Kindergarten**

**Math**

**Measurement**

K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length (shorter, longer), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder). Examples of nonstandard units include foot length, hand span, new pencil, paper clip, block.

**Geometry**

K.12 The student will describe the location of one object relative to another (above, below, next to) and identify representations of plane geometric figures (circle, triangle, square, and rectangle) regardless of their position and orientation in space.

**Science**

K.2 Students will investigate and understand that humans have senses that allow one to seek, find, take in, and react or respond to information in order to learn about one’s surroundings. Key concepts include

a) five senses and corresponding sensing organs (taste – tongue, touch – skin, smell – nose, hearing – ears, and sight – eyes); and

**Matter**

K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described. Key concepts include

a) colors (red, orange, yellow, green, blue, purple), white, and black;

b) shapes (circle, triangle, square, and rectangle) and forms (flexible/stiff, straight/curved);

c) textures (rough/smooth) and feel (hard/soft);

d) relative size and weight (big/little, large/small, heavy/light, wide/thin, long/short); and

e) position (over/under, in/out, above/below, left/right) and speed (fast/slow).

**Life Process**

K.6 The student will investigate and understand basic needs and life processes of plants and animals. Key concepts include

a) living things change as they grow, and they need food, water, and air to survive;

b) plants and animals live and die (go through a life cycle); and

c) offspring of plants and animals are similar but not identical to their parents and to one another.

**Earth Patterns, Cycles, and Change**

K.8 The student will investigate and understand simple patterns in his/her daily life. Key concepts include

a) weather observations;

b) the shapes and forms of many common natural objects including seeds, cones, and leaves;

c) animal and plant growth; and

d) home and school routines.

K.9 The student will investigate and understand that change occurs over time and rates may be fast or slow. Key concepts include
natural and human-made things may change over time; and

changes can be noted and measured.

History
K.2 The student will describe everyday life in the present and in the past and begin to recognize that things change over time.

Economics
K.7 The Student will
b) recognize that people use money to purchase goods

Civics
K.8 The student will demonstrate that being a good citizen involves
c) taking care of personal belongings and respecting what belongs to others;

Physical Education
Personal Fitness
K.3 The student will participate for short periods of time in moderate-to-vigorous physical activities that cause increased heart rate, breathing rate, and perspiration.

Responsible Behavior
K.4 The student will use appropriate behaviors and safe practices in physical activity settings.
a) Demonstrate good listening skills when learning procedures and receiving instruction.

Health
Community Health and Wellness
K.6 The student will identify expectations for personal behavior in school and social settings. Key concepts/skills include
b) respect for the property and rights of others;
c) respect for the personal space of others.

Grade One

Math
Measurement
1.14 The student will compare the weights of two objects, using a balance scale.

Geometry
1.17 The student will identify and describe objects in his/her environment that depict plane geometric figures (triangle, rectangle, square, and circle).

History
Civics
1.10 The student will apply the traits of a good citizen by
a) focusing on fair play, exhibiting good sportsmanship, helping others, and treating others with respect;
b) recognizing the purpose of rules and practicing self-control;

Science
Life Processes
1.4 The student will investigate and understand that plants have life needs and functional parts and can be classified according to certain characteristics. Key concepts include
a) needs (food, air, water, light, and a place to grow);
b) parts (seeds, roots, stems, leaves, blossoms, fruits); and
c) characteristics (edible/non-edible, flowering/non-flowering, evergreen/deciduous).

Earth Patterns, Cycles, and Change
1.7 The student will investigate and understand the relationship of seasonal change and weather to the activities and life processes of plants and animals. Key concepts include how temperature, light, and precipitation bring about changes in
   a) plants (growth, budding, falling leaves, and wilting);
   b) animals (behaviors, hibernation, migration, body covering, and habitat); and

1.5 The student will investigate and understand that animals, including people, have life needs and specific physical characteristics and can be classified according to certain characteristics. Key concepts include
   a) life needs (air, food, water, and a suitable place to live);
   b) physical characteristics (body coverings, body shape, appendages, and methods of movement); and
   c) other characteristics (wild/tame, water homes/land homes).

Health
Community Health and Wellness
1.6 The student will demonstrate responsible personal and social behaviors in the school community. Key concepts/skills include
   a) cooperative behavior;
   b) respect for others;
   c) respect for the property of others.
1.7 The student will explain that his/her personal decisions help contribute to a healthy environment. Key concepts/skills include
   a) the proper disposal of trash;

Grade Two
Math
Measurement
2.19 The student will read the temperature on a Celsius and/or Fahrenheit thermometer to the nearest 10 degrees.

Geometry
2.22 The student will compare and contrast plane and solid geometric shapes (circle/sphere, square/cube, and rectangle/rectangular solid).

History
Civics
2.10 The student will explain the responsibilities of a good citizen, with emphasis on
   a) respecting and protecting the rights and property of others;

Science
2.1 The student will conduct investigations in which
   e) length, volume, mass, and temperature measurements are made in metric units (centimeters, meters, liters, degrees Celsius, grams, kilograms) and standard English units (inches, feet, yards, cups, pints, quarts, gallons, degrees Fahrenheit, ounces, pounds);

Matter
2.3 The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include
   b) processes involved with changes in matter from one state to another (condensation, evaporation, melting, and freezing).

Life Processes
2.4 The student will investigate and understand that plants and animals undergo a series of orderly changes in their life cycles. Key concepts include

Physical Education
Responsible Behavior
2.4 The student will exhibit, in physical activity settings, cooperative, respectful, and safe behaviors.
Grade Three

Math
Measurement
3.17 The student will read temperature to the nearest degree from a Celsius thermometer and a Fahrenheit thermometer. Real thermometers and physical models of thermometers will be used.

Science
Scientific Investigation, Reasoning, and Logic
3.1 The student will plan and conduct investigations in which
h) temperature is measured to the nearest degree Celsius;

Force, Motion, and Energy
3.2 The student will investigate and understand simple machines and their uses. Key concepts include
a) types of simple machines (lever, screw, pulley, wheel and axle, inclined plane, and wedge);
 b) how simple machines function;
 c) compound machines (scissors, wheelbarrow, and bicycle); and
d) examples of simple and compound machines found in the school, home, and work environment.

Life Processes
3.4 The student will investigate and understand that behavioral and physical adaptations allow animals to respond to life needs. Key concepts include
a) methods of gathering and storing food, finding shelter, defending themselves, and rearing young; and
 b) hibernation, migration, camouflage, mimicry, instinct, and learned behavior

Living Systems
3.6 The student will investigate and understand that environments support a diversity of plants and animals that share limited resources. Key concepts include
a) water-related environments (pond, marshland, swamp, stream, river, and ocean environments);
 b) dry-land environments (desert, grassland, rain forest, and forest environments)

Interrelationships in Earth/Space Systems
3.7 The student will investigate and understand the major components of soil, its origin, and importance to plants and animals including humans. Key concepts include
a) soil provides the support and nutrients necessary for plant growth;
b) topsoil is a natural product of subsoil and bedrock;
c) rock, clay, silt, sand, and humus are components of soils; and
d) soil is a natural resource and should be conserved.

Earth Patterns, Cycles, and Change
3.8 The student will investigate and understand basic patterns and cycles occurring in nature. Key concepts include
a) patterns of natural events (day and night, seasonal changes, phases of the moon, and tides); and
 b) animal and plant life cycles.

3.9 The student will investigate and understand the water cycle and its relationship to life on Earth. Key concepts include
a) the energy from the sun drives the water cycle;
b) processes involved in the water cycle (evaporation, condensation, precipitation);
c) water is essential for living things; and
d) water supply and water conservation.

Resources
3.10 The student will investigate and understand that natural events and human influences can affect
the survival of species. Key concepts include
   a) the interdependency of plants and animals;
   b) the effects of human activity on the quality of air, water, and habitat;
   c) the effects of fire, flood, disease, and erosion on organisms; and
   d) conservation and resource renewal.

3.11 The student will investigate and understand different sources of energy. Key concepts include
   a) the sun’s ability to produce light and heat energy;
   b) sources of energy (sunlight, water, wind);
   c) fossil fuels (coal, oil, natural gas) and wood; and
   d) renewable and nonrenewable energy resources.

Physical Education
Personal Fitness
3.3 The student will engage in a variety of moderate and vigorous physical activities and describe
how and why the body responds to the activities (e.g., physiological changes such as sweating, increased
heart rate, increased respiration).