

## UNDER THE RIVER PROGRAM

### 5<sup>th</sup> Grade Standards

#### Science:

- 5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.
- 5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
- 5-PS1-3. Make observations and measurements to identify materials based on their properties.
- 5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
- 5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.
- 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- 5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- 5-ESS2-2. Describe and graph the amounts and percentages of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

#### Social Studies:

- 5.C.RR.1 Analyze responsibilities of U.S. citizens by explaining and demonstrating ways to show good citizenship.
- 5.C.KGO.1 Explain the roles and responsibilities of a Kentucky citizen.
- 5.E.IC.1 Analyze how incentives and opportunity costs impact decision making, using examples from history.
- 5.G.MM.1 Analyze how cultural, economic and environmental factors encouraged and restricted the movement of people, ideas and goods to and within the United States.
- 5.G.KGE.1 Compare the lives of Kentucky settlers to those living in other areas during the early years of the United States.

#### Health Education:

- Standard 1 Students will comprehend content related to health promotion and disease prevention to enhance health. (5.1.4 & 5.1.5)
- Standard 4 Use interpersonal communication skills to enhance health and avoid or reduce health risks. (5.4.1)

**Math:**

KY.5.MD.1 Convert among different size measurement units (mass, weight, liquid volume, length, time) within one system of units (metric system, U.S. standard system and time).

KY.5.MD.2 Identify and gather data for statistical questions focused on both categorical and numerical data. Select an appropriate data display (bar graph, pictograph, dot plot). Make observations from the graph about the questions posed.

**Career Studies and Financial Literacy:**

ES.I.2 Demonstrate flexibility and willingness to try new things (e.g., critical thinking, problem solving).

ES.I.5 Practice on-task behaviors with minimal direction.

ES.I.7 Practice personal responsibility.

ES.I.8 Follow classroom procedures, activities, and behavior in various settings.

ES.I.13 Describe the risk associated with the inappropriate use of household products, medications and alcohol.

C.I.6 Use various sources of career information (e.g., Career Day, guest speaker, field trips, virtual field trips, career fairs, career websites) to evaluate jobs/careers that reflect individual interests/needs.

C.I.8 Identify and follow agreed-upon collaborative skills (e.g., attendance, respect, preparedness, quality of work, time-management) that are necessary for both the classroom and workplace.

**Standards Covered Specifically if Class is Performing pH Activity:**

**Math:**

KY.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. MP.2, MP.7

KY.5.NBT.2 Multiply and divide by powers of 10. • Explain patterns in the number of zeros of the product when multiplying a number by powers of 10. • Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. • Use whole-number exponents to denote powers of 10.

**Career Studies:**

ES.I.9 Apply reading, writing and mathematics skills to authentic, real-world tasks.

C.I.5 Explain how academic content learned in school (e.g., mathematics, reading/writing, science, social studies) impacts future jobs/careers.