

DRAFT

Grade Level Expectations (Grade 6) Food and Nutrition

| FOSS Investigations | Essential Learning Indicators Targeted |
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| <p>Investigation 1: The Fat Test Part 1 – Setting Up the Fat Test Part 2 – Reading the Fat Test</p> <p>Investigation 2: The Sugar Test Part 1 – Yeast as an Indicator Part 2 – Testing Cereals Part 3 – Testing Other Foods</p> <p>Investigation 3: The Acid Test Part 1 – Baking Soda as an Indicator Part 2 – Acid in Fruit Part 3 – Vitamin C Search</p> <p>Investigation 4: Free Lunch Part 1 – Free Lunch Part 2 – Choosing Your Own Investigation</p> | <p>*1.1.1 Understand how to use physical and chemical properties to sort and identify substances. W</p> <ul style="list-style-type: none">Identify, categorize, describe, and sort substances using physical and/or chemical properties. <p>1.1.4 Understand that energy is a property of matter, objects, and systems and comes in many forms (i.e. heat energy, kinetic energy, potential energy, and chemical energy). W</p> <ul style="list-style-type: none">Describe the forms of energy present in matter, objects, and systemsDescribe the form of energy stored in a part of a system. <p>1.2.3 Understand that all matter is made of particles called atoms and that atoms may combine to form molecules and that atoms and molecules can form mixtures. W</p> <ul style="list-style-type: none">Describe that matter is made of particles called atoms and molecules. <p>*1.2.8 Understand human life functions and the interconnecting organ systems necessary to maintain human life. W</p> <ul style="list-style-type: none">Describe the components and functions of the organ system (i.e. circulatory, digestive, reproductive, excretory, nervous-sensory, respiratory, and muscular-skeletal systems) <p>1.3.8 (5) Understand that living things need constant energy and matter. W</p> <ul style="list-style-type: none">Identify sources of energy and matter used by animals to grow and sustain life (e.g. air, water, light, food, mineral nutrients). <p>*2.1.1 Understand how to generate a question that can be answered through scientific investigation. W</p> <ul style="list-style-type: none">Generate a question that can be investigated scientifically.Generate a new question that can be investigated with the same materials and/or data as a given investigation. <p>*2.1.2 Understand how to plan and conduct scientific investigations . W</p> <ul style="list-style-type: none">Make predictions (hypothesize) and give reasons.Generate a logical plan for, and conduct, a simple controlled investigation with the following attributes: prediction (hypothesis); appropriate materials, tools, and available computer technology; variables kept the same (controlled); one changed variable (manipulated); responding (dependent) variable; gather, record, and organize data using appropriate units, charts, and/or graphs; multiple trials.Identify and explain safety requirements that would be needed in the investigation. <p>*2.1.3 Apply understanding of how to construct a scientific explanation using evidence and inferential logic. W</p> <ul style="list-style-type: none">Generate a scientific conclusion including supporting data from an investigation using inferential logic.Describe a reason for a given conclusion using evidence from an investigation.Generate a scientific explanation of observed phenomena using given data.Predict what logically might occur if an investigation lasted longer or was changed. <p>*2.1.5 Apply understanding of how to report investigations and explanations of objects, events, systems, and processes. W</p> <ul style="list-style-type: none">Report observations of scientific investigations without making inferences.Summarize an investigation by describing: reasons for selecting the investigative design; materials used in the investigation; observations, data, results; explanations and conclusions in written, mathematical, oral, and information |

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| | <p>technology presentation formats; safety procedures used; safety procedures used</p> <ul style="list-style-type: none"> • Describe the difference between an objective summary of data and an inference made from data. <p>2.2.1 Apply curiosity, honesty, skepticism, and openness when considering explanations and conducting investigations. <i>W</i></p> <ul style="list-style-type: none"> • Explain why an honest response to questionable results, conclusions, or explanations is important to the scientific enterprise. • Describe how scientists accurately and honestly record, report, and share observations and measurements without bias. • Explain why honest acknowledgement of the contributions of others and information sources are necessary. <p>2.2.3 Analyze inconsistent results from scientific investigations to determine how the results can be explained. <i>W</i></p> <ul style="list-style-type: none"> • Compare two or more similar investigations and explain why different results were produced. • Explain whether sufficient information has been obtained to make a conclusion. <p>2.2.4 Understand how to make the results of scientific investigations reliable and how to make the methods of investigation valid. <i>W</i></p> <ul style="list-style-type: none"> • Describe how the method of investigation ensures reliable results. • Describe how to increase the reliability of the results of an investigation. <p>*3.2.3 Analyze the use of science, mathematics, and technology within occupational/career areas of interest.</p> <ul style="list-style-type: none"> • Examine scientific, mathematical, and technological knowledge and skills used in an occupation/ career. • Research occupations/careers that require knowledge of science, mathematics, and technology. |

*GLE's assessed in formative assessments found in WA Assessment Folio.

GLEs in italics are not currently in the investigations but could be addressed with extension activities, FOSS Science Stories, and other resources.