DRAFT

Grade Level Expectations (Grade 5)
Food and Nutrition

FOSS Investigations	Essential Learning Indicators Targeted
Investigation 1: **The Fat Test** Part 1 – Setting Up the Fat Test Part 2 – Reading the Fat Test **Investigation 2:** **The Sugar Test** Part 1 – Yeast as an Indicator Part 2 – Testing Cereals Part 3 – Testing Other Foods **Investigation 3:** **The Acid Test** Part 1 – Baking Soda as an Indicator Part 2 – Acid in Fruit Part 3 – Vitamin C Search **Investigation 4:** **Free Lunch** Part 1 – Free Lunch Part 2 – Choosing Your Own Investigation	*1.1.1 Understand how to use properties to sort natural and manufactured materials and objects. W (Investigation 1) • Identify, describe, and sort objects and materials using observed physical properties. *1.1.4 Understand that energy comes in many forms. W (Investigations 1 & 2) • Describe the forms of energy present in a system (i.e. energy of motion (kinetic), heat energy, food energy). *1.2.3 Know that substances are made of small particles. W (Investigations 1-3)* • *Identify small parts of a substance as still being that substance.* • *Describe objects that are made of only one kind of material and objects made of several kinds of materials.* *1.2.8 Understand the organization and function of human body structures and organs and how these structures and organs interconnect. W (Investigation 2)* *1.3.3 Understand that a substance remains the same substance when changing state. Understand that two or more substances can react to become new substances. W (Investigation 3) *1.3.8 Understand that living things need constant energy and matter. W (Investigation 1, 2 & 4) • Identify sources of energy and matter used by animals to grow and sustain life (e.g. air, water, light, food, mineral nutrients). *2.1.1 Understand how to ask a question about objects, organisms, and events in the environment. W • Identify the question being answered in an investigation. • Ask questions about objects, organisms, and events based on observations of the natural world. • Develop a new question that can be investigated with the same materials and/or data as a given investigation. *2.1.2 Understand how to plan and conduct simple investigations following all safety rules. W • Make predictions of the results of an investigation. • Generate a logical plan for, and conduct, a simple controlled investigation with the following attributes: prediction; appropriate materials, tools, and available computer technology; variables kept the same (controlled); one changed variable (manipulated); measured (responding) variable; gather, record, and organize data using appropriate units, charts, and/or graphs; multiple trials. • Identify and use simple equipment and tools to gather data and extend the senses. • Follow all safety rules during investigations. *2.1.3 Understand how to construct a reasonable explanation using evidence. W • Generate a scientific conclusion including supporting data from an investigation. • 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. *2.1.5 Understand how to report investigations and explanations of objects, events, systems, and processes. W • Report observations or data of simple 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 technology presentation formats; safety procedures used. 2.2.1 Understand that all scientific observations should be reported accurately and honestly even when the observations

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	contradict expectations. W • Explain why scientific observations are recorded accurately and honestly. • Explain why scientific records of observations are not changed even when the records do not match initial expectations. • Explain why honest acknowledgement of the contributions of others and information sources are necessary. 2.2.3 Understand why similar investigations may not produce similar results. W (Investigations 1-3) • Describe reasons why two similar investigations can produce different results. • Explain whether sufficient information has been obtained to make a conclusion. 2.2.4 Understand how to make the results of scientific investigations reliable. W (Investigations 1-3) • Describe how the method of investigation insures reliable results. • Identify and describe ways to increase the reliability of the results of an investigation. **3.2.3 Understand how knowledge and skills of science, mathematics, and technology are used in common occupations.* • *Identify science, math, and technology skills used in a career.* • *Identify occupations using scientific, mathematical, and technological knowledge and skills.*

*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.

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