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## Understanding Life Systems

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Students will understand that the human body is made up of a number of organs that work together in different systems. They will learn about the structures and functions of the digestive, skeletal, respiratory, circulatory, and nervous systems. They will be able to identify the major organs and parts of these systems, and examine how they work. In addition, students will investigate the effects of some social and environmental factors on their health. They will also learn to make healthy choices in their daily lives.

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## Understanding Structures and Mechanisms

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Students will examine the impacts of external forces, caused by natural occurrences and human activities, on structures, and investigate how structures can be strengthened. They will also explore how different types of internal and external forces act on structures, like different types of bridges in particular. In addition, students will discover how simple machines work together to make mechanical systems and how these systems provide mechanical advantages. They will also understand how protective equipment protects people during certain activities.

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## Section 3

### Understanding Matter and Energy

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Students will explore the properties of matter and the characteristics of the three states of matter, as well as the different ways of measuring and describing matter. They will examine how heat changes the states of matter, which are either physical or chemical changes, and learn that these changes can be reversible or irreversible. Moreover, students will investigate the environmental impacts of the production, use, and disposal of different materials.

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## Understanding Earth and Space Systems

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Students will learn about the different forms of energy and how they are used in their everyday lives. They will investigate the various energy sources and understand that these sources are either renewable or non-renewable. Moreover, they will explore the transformation of energy from one form to another. The impacts of energy use on the environment will also be studied. In addition, students will understand the importance of conserving energy and learn ways to reduce energy consumption.

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