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#### **Understanding Life Systems**

Students will focus on investigating the basic needs of living things, examining their similarities and differences, and learning about their general characteristics. The growth and changes in specific animals will also be discussed. Moreover, students will study the impacts human activities have on animals as well as how these impacts affect their development in the environment. They will also look at the importance of protecting animals and the places where they live.

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## Understanding Structures and Mechanisms

Students will learn about properties of materials and a variety of materials used to make objects. They will learn that a structure is not only an object but also a supporting framework that holds an object together. Furthermore, they will investigate how materials suit the purposes of structures or objects and how choices of materials affect the environment. The six basic types of simple machines (lever, inclined plane, pulley, wheel and axle, screw, and wedge) and how they help people do work will also be introduced.

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#### **Understanding Matter and Energy**

Students will develop an understanding that work, movement, growth, and change require energy. They will be able to identify the sources of energy and know that these energy sources are difficult to reach or are limited; hence, they should be used efficiently. In addition, students will investigate the properties of liquids and solids and how they are related and interact with each other. They will also learn how to handle hazardous liquids and solids safely.

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#### **Understanding Earth and Space Systems**

Students will discover that daily cycle creates day and night, and yearly cycle creates seasons. They will learn how these cycles affect living things including humans and how living things adapt to changing seasons. Additionally, students will learn about the characteristics of air and the properties of different forms of water in the environment. They will understand that all living things need air and water to survive, and learn about the impacts of human activities on the quality of air and water.

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#### -5 Water in the **Environment**

Water is a big part of our environment. In this unit, you will see that water is in the ground and in the air. You will see that it can be in three different states - solid, liquid, and gas.

After completing this unit, water as gas you will know that water has three states and is a large part of our environment. know that the water cycle anu involves evaporation, condensation, and precipitation. water as liquid snow (a form of precipitation)

Vocabulary

water as solid

evaporation: water changing from liquid to gas condensation: water changing from gas to liquid precipitation: water falling from the sky as rain, snow, or hail



#### Extension

Snowflakes are a solid form of water, like ice cubes. If you look at them very closely, you will see that they have beautiful formations. Did you know that...

- every snowflake has its own unique shape?
- no two snowflakes are alike?
- most snowflakes have six sides?

The next time you see fluffy snowflakes drifting down from the sky, don't forget to take a closer look at them.



### A. Label the water with "solid", "liquid", or "gas". Then circle the correct words.





- 3. Place a piece of paper over the water on each plate.
- 4. Wait one minute and then remove the pieces of paper from the plates. Record your result in the chart below.



Result	Liquid Absorbed			
Paper	Fully	Partly	Not at all	
Conclusion				
The hypethesis was				
My experiment		to d/did a of owne of	the	
hypothesis. supported/did not support				