

# ScienceTek

**Aligned with  
MATATAG Curriculum**

# **ScienceTek1**

INQUIRY-BASED APPROACH IN SCIENTIFIC LEARNING

Second Edition

Vincent A. Isidro





Trademark of TechFactors Inc.

Philippine Copyright 2024 by TechFactors Inc.

All rights reserved. No part of this courseware may be reproduced or copied in any form, in whole or in part, without written consent of the copyright owner.

First printing of the second edition, 2024  
ISBN 978-621-425-447-7

Published by TechFactors Inc.  
Printed in the Philippines

**Author** Vincent A. Isidro

**Cover Design** Christian Andrew B. Sabado

**Content and Editorial** Frances Paula L. Ibañez, MA

**Creatives** Aren Dave C. Dela Cruz

Exclusively distributed by TechFactors Inc.  
101 V. Luna Ave., Sikatuna Village,  
Diliman, Quezon City  
1101 Philippines

Telephone number: (632) 8929 6924  
Email address: [info@techfactors.com](mailto:info@techfactors.com)  
Website: [www.techfactors.com](http://www.techfactors.com)

Images with license from Freepik (<https://www.freepik.com>)

ScienceTek by TechFactors Inc. is an independent publication. All other trademarks are registered trademarks of their respective companies. Images used are either original, obtained from open domain sources, or covered by the Creative Commons license.

# FOREWORD

## ScienceTek: Inquiry-Based Approach in Scientific Learning

In the ever-evolving landscape of education, ScienceTek emerges as a beacon of innovation and excellence, meticulously crafted to align with the new DepEd Matatag Curriculum. This courseware is more than just a repository of scientific knowledge; it is a dynamic tool designed to resonate with the modern learner. By embracing the principles of the DepEd Matatag Curriculum, ScienceTek ensures that its content is not only relevant and comprehensive but also culturally responsive and inclusive, promoting a holistic understanding of science in the context of our rapidly changing world. This alignment with the latest educational standards underscores our commitment to providing educators and students with resources that are both current and pedagogically sound.

At the heart of ScienceTek is its inquiry-based learning approach, a method that transforms the classroom into a laboratory of curiosity and discovery. This approach encourages students to ask questions, formulate hypotheses, and engage in critical thinking, mirroring the real-world process of scientific inquiry. Moreover, the textbook integrates science process skills and an engineering approach, providing a unique blend that fosters problem-solving and analytical skills. These features are complemented by digital interactives, seamlessly integrating technology into the learning experience. These digital components not only enhance understanding but also cater to diverse learning styles, making ScienceTek an indispensable tool in the modern science classroom. This courseware is not simply focused on teaching science; it is dedicated to transforming science learning into a great experience.

**TechFactors Inc.**

# How To Use This Book

The descriptions of each lesson section in this courseware will serve as a guide in understanding its content and purpose for a fun and meaningful journey in science.



## Target

States the learning objectives for the lesson.



## Engage

Contains an image that would spark the interest of the students and poses engaging questions to stimulate inquiry in student.



## Explore

Presents a digital interactive or simulation to allow students to use their science process skills and serve as springboard to the key concepts presented in the lesson.



## Explain

Discusses the key concepts and includes illustrations and graphic organizers to aid students in developing mastery.



## Elaborate

Comprises an individual or collaborative activity that enables students to apply the knowledge and skills they have learned in various situations.



## Evaluate

Contains an assessment activity that will check what students have learned from the lesson.



## Extend

Includes a performance task that requires students to demonstrate their knowledge and skills by creating an output or product in a real-world context.

# What's New?

We are excited to share the latest enhancements in our ScienceTek courseware, meticulously designed to enrich your learning journey:

1. **Alignment with DepEd Matatag Curriculum:** Our content is now fully aligned with the latest DepEd Matatag Curriculum, ensuring relevance and up-to-date educational standards.
2. **Enhanced Conceptual Depth and Breadth:** Dive deeper into key scientific concepts with our improved content, offering a more comprehensive understanding of each topic.
3. **Revamped DepEd Matatag Curriculum-Aligned Interactives:** Engage with our interactives, now fine-tuned to align with the DepEd Matatag Curriculum, for a more immersive and effective learning process.
4. **Improved Assessment Tools:** Test your knowledge with our assessment tools, standardized for easy administration and specifically designed to stimulate higher-order thinking skills.
5. **New Processing Activities:** To reinforce learning, we have included novel processing activities aimed at boosting mastery and retention.
6. **Fresh Layout and Design:** Experience our content in a new light with a revamped layout and design, making learning not just educational but visually appealing.
7. **Vibrant New Illustrations:** Bring learning to life with our vivid, newly added illustrations, making complex concepts easier and more enjoyable to grasp.

Embark on a dynamic educational journey with ScienceTek's latest offerings, where learning is made a great experience!



# ABOUT THE AUTHOR

## **Vincent A. Isidro**

Vincent graduated *magna cum laude* from the University of the Philippines-Diliman with a Bachelor in Elementary Education Major in Science and Health. He is currently completing his Master of Arts in Education Major in General Science from the same university. He previously worked as a science teacher and is currently a content developer in TechFactors, Inc.

# TABLE OF CONTENTS

|                      |                                      |                |
|----------------------|--------------------------------------|----------------|
| <b>Quarter 1</b>     |                                      | <b>1</b>       |
| Lesson 1             | Shapes Around You                    | 3              |
| Lesson 2             | Fun with Sizes                       | 11             |
| Lesson 3             | World of Colors                      | 17             |
| Lesson 4             | Let Us Touch and Feel                | 23             |
| Lesson 5             | Test Your Taste Buds                 | 31             |
| Lesson 6             | Smell It!                            | 37             |
| Lesson 7             | Common Objects at Home and in School | 44             |
|                      | Performance Task                     | 50             |
| <br><b>Quarter 2</b> |                                      | <br><b>52</b>  |
| Lesson 1             | All About My Head                    | 53             |
| Lesson 2             | Meet the Torso                       | 58             |
| Lesson 3             | Lively Limbs                         | 63             |
| Lesson 4             | Basic Needs of the Body              | 68             |
| Lesson 5             | Healthy Habits                       | 72             |
| Lesson 6             | Animal Around Us                     | 76             |
| Lesson 7             | Plants Around Us                     | 82             |
|                      | Performance Task                     | 89             |
| <br><b>Quarter 3</b> |                                      | <br><b>91</b>  |
| Lesson 1             | On the Move                          | 92             |
| Lesson 2             | Sounds All Around                    | 96             |
| Lesson 3             | Soft and Loud Sounds                 | 101            |
| Lesson 4             | Light It Up                          | 106            |
| Lesson 5             | Sources of Light                     | 111            |
| Lesson 6             | Hot or Not                           | 116            |
| Lesson 7             | Sources and Uses of Heat             | 121            |
|                      | Performance Task                     | 127            |
| <br><b>Quarter 4</b> |                                      | <br><b>130</b> |
| Lesson 1             | Sunny Day                            | 131            |
| Lesson 2             | Cloudy Day                           | 135            |
| Lesson 3             | Windy Day                            | 140            |
| Lesson 4             | Rainy Day                            | 145            |
| Lesson 5             | Stormy Day                           | 150            |
| Lesson 6             | Let Us Be Weather Safe               | 154            |
| Lesson 7             | Sun, Moon, and Stars                 | 158            |
|                      | Performance Task                     | 163            |



In this quarter, you are going to discover all sorts of cool things! You will learn about the shapes, sizes, colors, textures, tastes, and smells of the things around you. You will even find out about things people use every day at home and in school. And guess what? You will also learn the right way to use these things. Are you excited to explore the cool objects around you? Let's get started!





# LESSON 1

## Shapes Around You



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the shape of different objects.
- ◇ Give examples of objects with different shapes.



### Engage



*What are the shapes around you?*





## Different Shapes

### Objective

- ◇ Find out the shape of an object.

### Instruction from the Interactive

#### A. Circle

1. Trace the circle.
2. Drag the circle-shaped objects to the circle you traced.

#### B. Oval

1. Trace the oval shape.
2. Drag the oval objects to the oval you traced.

#### C. Triangle

1. Count the sides and corners of the triangle. Click the number that tells how many sides and corners the triangle has.
2. Trace the triangle shape.
3. Drag the triangle-shaped objects to the triangle you traced.



## D. Square

1. Count the sides and corners of the square. Click the number that tells how many sides and corners the square has.
2. Trace the square shape.
3. Drag the square-shaped objects to the square you traced.

## E. Rectangle

1. Count the sides and corners of the rectangle. Click the number that tells how many sides and corners the rectangle has.
2. Trace the rectangle shape.
3. Drag the rectangle-shaped objects to the rectangle you traced.

## F. Star

1. Count the sides and corners of the star. Click the number that tells the how many sides and corners the star has.

## Guide Questions

1. How many sides does the triangle have? How about the square, the rectangle, and the star?
2. How many corners does the triangle have? How about the square, the rectangle, and the star?



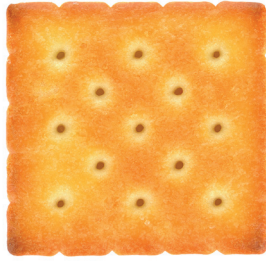
A **circle** has no sides and no corners.



An **oval** looks like a stretched-out circle.



A **triangle** has three sides and three corners.



A **square** has four equal sides and four corners.



A **rectangle** has four sides and four corners.



A **star** has ten sides and five corners.



## Elaborate

Look around your classroom. Draw an object for each shape below. Then, write the name of the object.



Circle



Triangle



Square



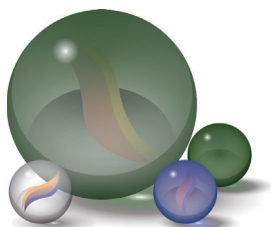
Rectangle



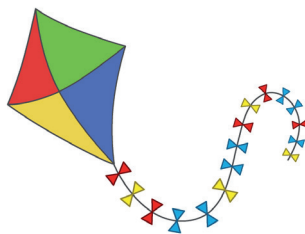
## Evaluate

Encircle the object that DOES NOT belong to the group.  
This object has a different shape from the other objects.

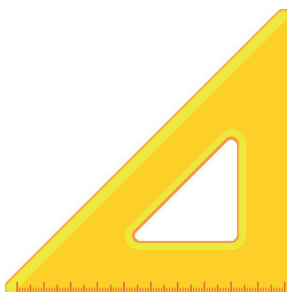
1.



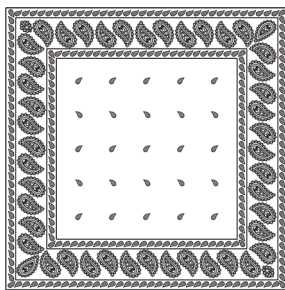
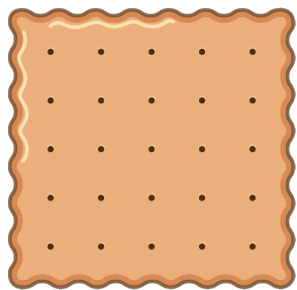
2.



3.



4.



5.





# LESSON 2

## Fun with Sizes



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the size of different objects.
- ◇ Give examples of objects with different sizes.



### Engage



*How do objects differ in size?*



Access the interactive  
to perform the activity..



## Different Sizes

### Objective

- ◇ Describe an object according to its size.

### Instructions from the Interactive

#### A. Objects Differ in Size

1. Open the Russian dolls by clicking on the biggest doll, then the next doll, and so on.
2. Put them back together, but this time start from the smallest doll.

#### B. Small Objects

1. Which objects can you hide in your pocket? Put them inside the pocket.

#### C. Big Objects

1. Can you tell which objects will NOT fit in the box? Try putting them inside the box.

#### D. Length of Objects

1. Trace the arrows on the screen. Tell which one is short.
2. Tell which one is long.
3. On the screen are pairs of objects. Put a red star on the object that is longer.
4. This time, put a blue star on the object that is shorter.

## Guide Questions

1. What are the objects that can fit in your pocket?
2. What are the objects that will NOT fit in the box?



### Explain

The **size** of an object tells how big or small it is.



Some objects are **small**.



Some objects are **big**.

The **length** of an object tells how long or short it is.



Some objects are **short**.

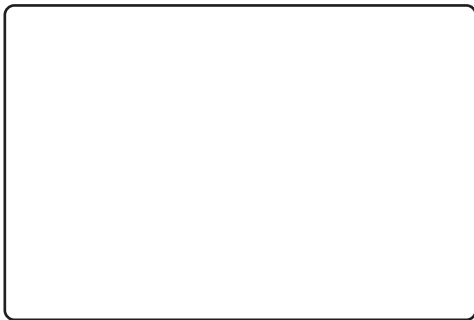


Some objects are **long**.

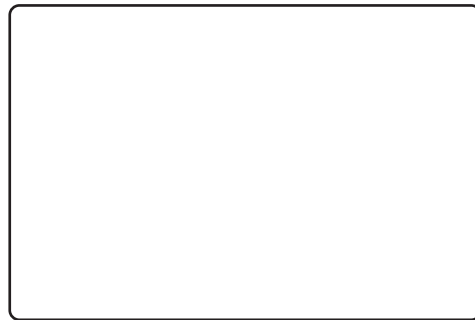


## Elaborate

Look around your classroom. Draw an object for each size and length below. Then, write the name of the object.



Small



Big



Short

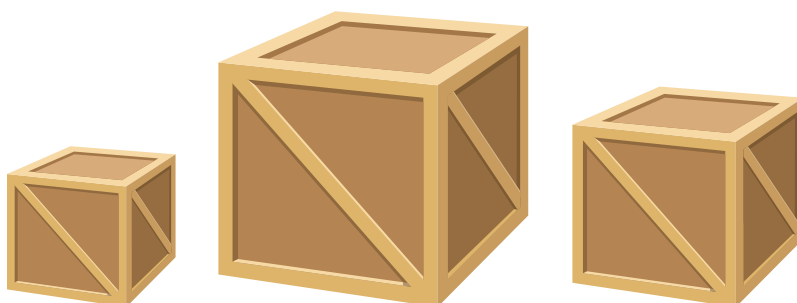


Long

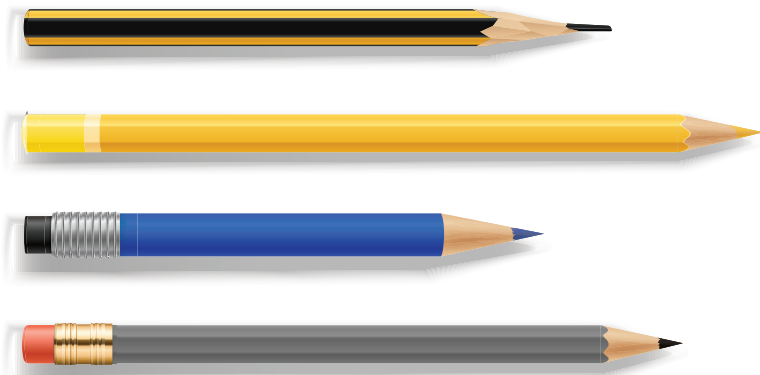


## Evaluate

Rank the objects from biggest to smallest (1 being the biggest and 3 being the smallest). Write the number beside the object.



Rank the pencils from longest to shortest (1 being the longest and 4 being the shortest). Write the number beside the object.



# LESSON 3

## World of Colors



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the color of different objects.
- ◇ Give examples of objects with different colors.



### Engage



*What are the different colors around you?*





## Different Colors

### Objective

- ◇ Find out the color of an object.

### Instructions from the Interactive

#### A. Light and Dark

1. Separate the light-colored clothes from the dark-colored ones.
2. Put these clothes in the correct basket.

#### B. Red and Orange

1. Separate the red-colored objects from the orange-colored objects.
2. Put these objects in the correct box.

#### C. Yellow and Green

1. Swipe up the yellow-colored objects. Swipe down the green-colored objects.

#### D. Blue and Violet

1. Separate the blue-colored objects from the violet-colored objects.
2. Put the objects in the correct box.



## Guide Questions

1. What are the red-colored objects?
2. What are the orange-colored objects?
3. What are the yellow-colored objects?
4. What are the green-colored objects?
5. What are the blue-colored objects?
6. What are the violet-colored objects?



### Explain



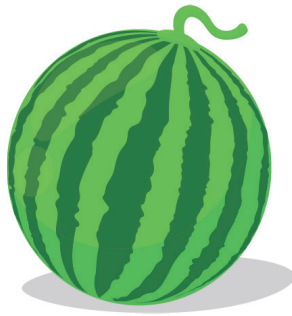
Some materials objects are **red** in color.



Some materials objects are **orange** in color.



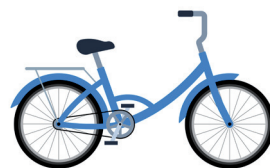
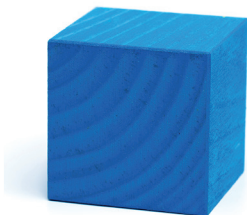
Some materials objects are **yellow** in color.



Some materials objects are **green** in color.



Some materials objects are **violet** in color.



Some materials objects are **blue** in color.



## Elaborate

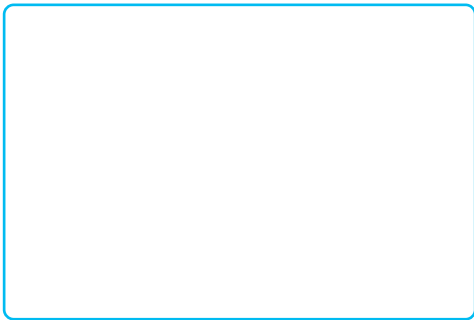
Look around your classroom and surroundings. Draw an object for each color below. Then, color the object.



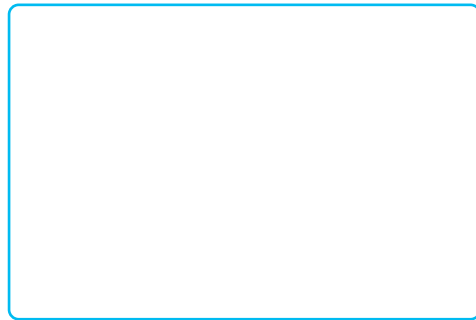
Red



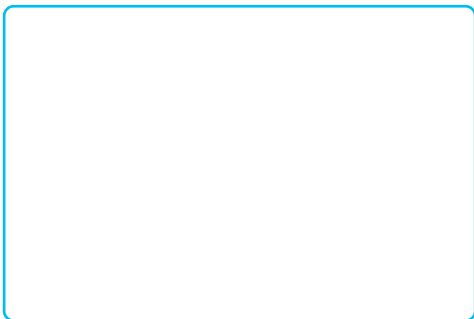
Orange



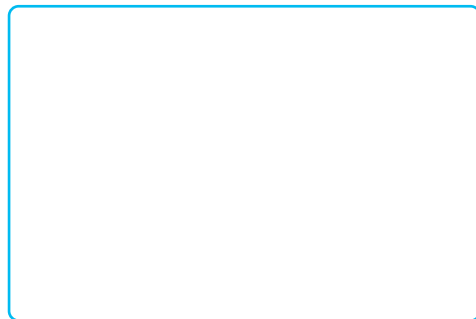
Yellow



Green



Blue



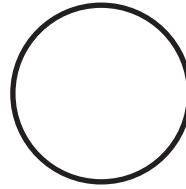
Violet



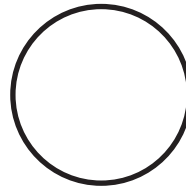
## Evaluate

Look around you. What color is the object? Color the circle.

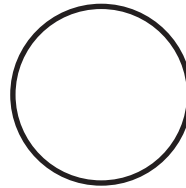
1. What color is your table?



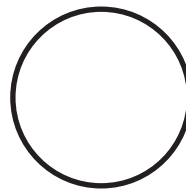
2. What color is your chair?



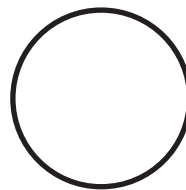
3. What color is your bag?



4. What color are your shoes?



5. What color is your pencil?



# LESSON 4

## Let Us Touch and Feel



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the texture of different objects.
- ◇ Give examples of objects with different textures.



### Engage



*How do objects differ in texture?*



## Different Textures

### Objective

- ◇ Find out how different objects feel.

### Instructions from the Interactive

#### A. Rough Texture

Move the magnifying glass on the objects on the screen.  
Click the object that has a bumpy surface.

#### B. Smooth Texture

Move the magnifying glass on the objects on the screen.  
Click the object that has a smooth surface.

#### C. Hard Object

Squeeze the objects on the screen. Which object is hard?

#### D. Soft Object

Squeeze the objects on the screen. Which object is soft?

#### E. Temperature

1. Dip the thermometer in each drink. See how the thermometer works.
2. Choose which object is cold and which is hot.
3. Drag the object to the blue space if it is cold.
4. Drag the object to the red space if it is hot.

### Guide Questions

1. What objects have a bumpy surface?

2. What objects have a smooth surface?
3. What objects are hard?
4. What objects are soft?
5. What objects are cold?
6. What objects are hot?



## Explain

The **texture** of an object tells the feel of its surface.

### Rough Surface

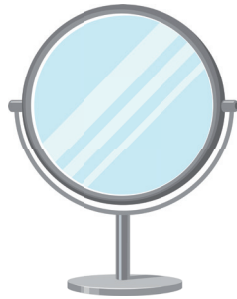
Some objects have a bumpy surface.





## Smooth Surface

Some objects have an even surface.



The **hardness** of an object describes how hard it is when touched.



A **hard** object does not change its shape when squeezed.



A **soft** object changes in shape when squeezed.



The **temperature** of an object tells how hot or cold it is.

A **cold** object has a low temperature.



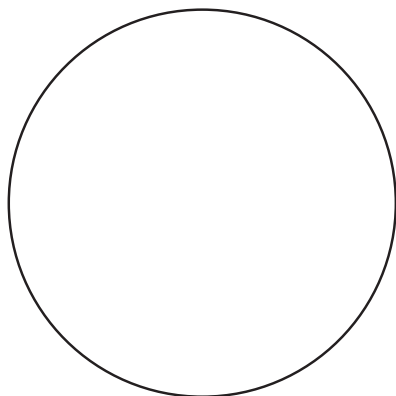
A **hot** object has a high temperature.



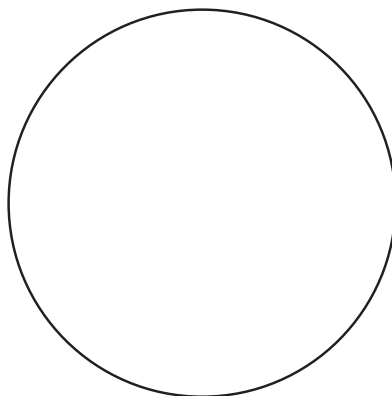


## Elaborate

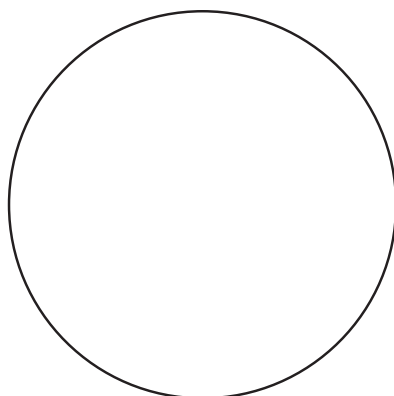
Think of the objects that are rough, smooth, hard, soft, warm, and cold. Draw them in the proper circle below.



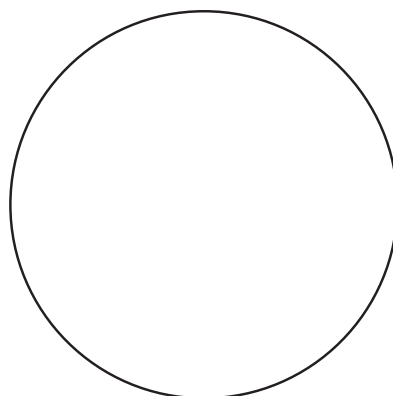
Smooth



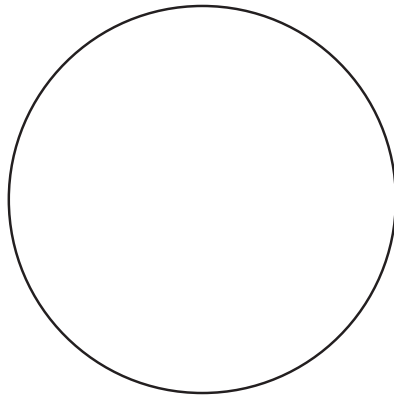
Hot



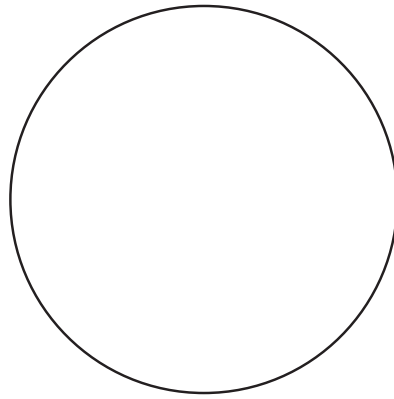
Hard



Cold



Soft



Rough



## Evaluate

Circle the correct answer for each question.

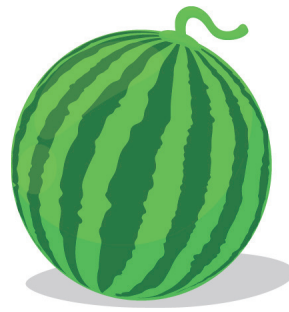
1. Which object is hot?



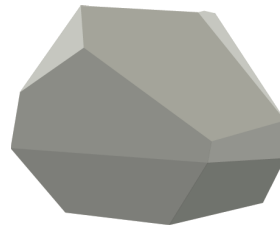
2. Which object is soft?



3. Which object is smooth?



4. Which object is hard?



5. Which object is cold?



# LESSON 5

## Test Your Taste Buds



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the taste of different foods.
- ◇ Give examples of foods with different tastes.



### Engage



*What is your favorite food? Why do you like it so much?*



## Kinds of Taste

### Objective

- ◇ Find out how different foods taste.

### Instructions from the Interactive

#### A. Taste Buds

Move the magnifying glass and see what is in your tongue.

#### B. Sweet Taste

Scratch the photos to show some sweet food.

#### C. Salty Taste

Scratch the photos to show some salty food.

#### D. Bitter Taste

Scratch the photos to show some bitter food.

#### E. Sour Taste

Sour food can make your face frown after eating. Let the man taste each food. See what happens to his face.

### Guide Questions

1. What food tastes sweet?
2. What food tastes salty?
3. What food tastes bitter?
4. What food tastes sour?



## Explain

Some food tastes **sweet** like lollipop.



Some food tastes **salty** like potato chips.



Some food tastes **bitter** like ampalaya.



Some food tastes **sour** like calamansi.



## Elaborate

Find a partner and share your three favorite foods. Describe the taste and explain in class why you like this food.

| My Favorite Food | What It Tastes Like |
|------------------|---------------------|
| 1.               |                     |
| 2.               |                     |
| 3.               |                     |





## Evaluate

Circle the food that matches the taste.

1. Which food is sweet?



candy



malunggay

2. Which food is sour?



calamansi



chocolate ice  
cream

3. Which food is salty?



mango



French fries

4. Which food is bitter?



burger



medicine tablet

5. Which food is sweet?



donut



fried chicken

# LESSON 6

## Smell It!



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the smell of different objects.
- ◇ Give examples of objects with different smells.



### Engage



*What objects have pleasant smells? What objects have unpleasant smells?*



Access the interactive  
to perform the activity.



## Kinds of Smell

### Objective

- ◇ Find out how different objects smell.

### Instructions from the Interactive

1. Let the girl smell the objects shown on the screen.
2. If the smell is pleasant, the girl will smile.
3. If the smell is unpleasant, the girl will frown.

### Guide Questions

1. Which objects smell pleasant?
2. Which objects smell unpleasant?



## Explain

The objects around us can smell differently. Using our nose, we can identify the smell of objects.

### Fragrant Smell

Some materials have a fragrant smell. They are pleasant and nice to smell just like perfume.



### Foul Smell

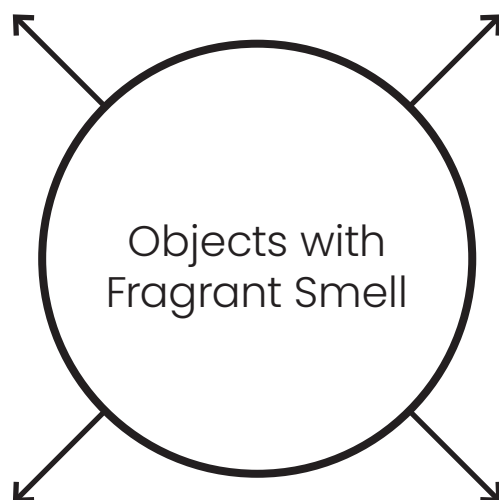
Some materials have a foul smell. They are unpleasant to smell just like garbage.

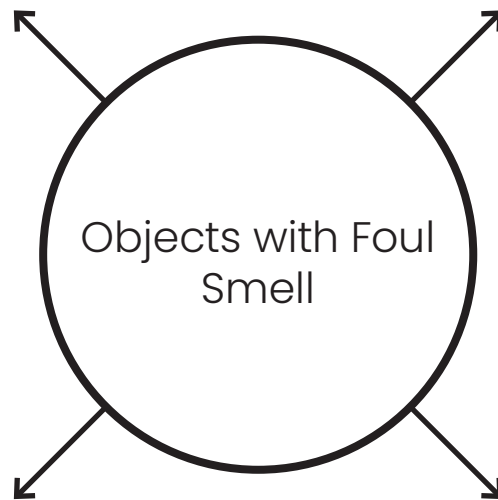




## Elaborate

Find a partner and think of objects that have a fragrant smell and foul smell. Draw the objects around the circles.







## Evaluate

Circle **TRUE** if the statement is correct. Circle **FALSE** if not.

1. All objects have a pleasant smell.

TRUE

FALSE

2. The smell of an object tells its odor.

TRUE

FALSE

3. You can tell the smell of an object with your eyes.

TRUE

FALSE

4. An object with a pleasant smell is fragrant.

TRUE

FALSE



5. An object has a foul odor if it has an unpleasant smell.

TRUE

FALSE

# Common Objects at Home and in School



## Target

- ◇ Identify common objects at home and in school.
- ◇ Explain the proper way of using common objects.



## Engage



What are some objects you use at home?



## Complete the Set!

### Objectives

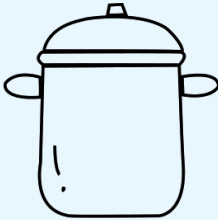
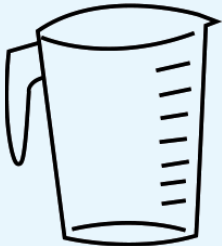
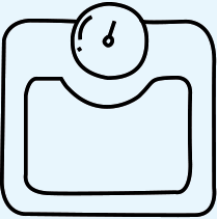
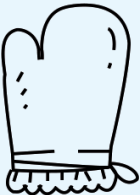
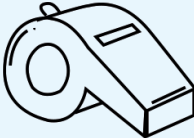
- ◇ Classify objects based on their use.

### Instructions from the Interactive

Color the objects that are needed to do the task.

### Guide Questions

What do you think is needed to perform the task? Color these objects.

| Cook Soup                                                                                                                                                               | Exercise                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |   |
|                                                                                      |                                                                                       |
|   |   |



We can find different objects at home and in school.

Some objects at home are used for eating and cooking, like pans, stoves, spoons, and forks.



Some objects at home are used for taking a bath, like soap, shampoo, and towels.

Some objects at home are used for cleaning the house, like brooms, mops, and dustpans.





At school we use different objects for studying, like books, blackboards, and pencils.

You should be careful when using common objects around you to avoid hurting yourself.

1. Do not use knives and scissors without an adult watching you.
2. Avoid playing near or touching a hot stove or pot.
3. Do not play with soap or other cleaning materials.
4. Do not put coloring objects and toys inside your mouth.



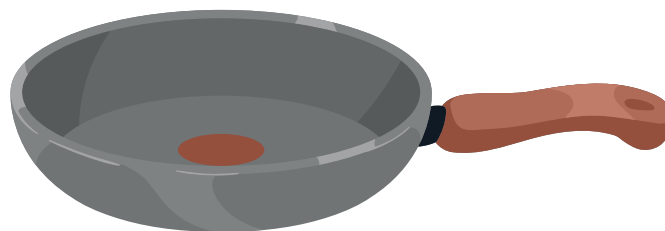
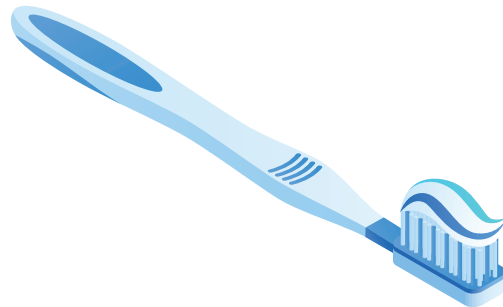
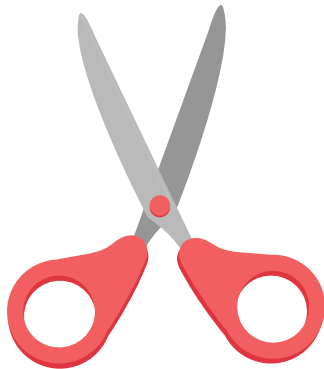
## Elaborate

What are common objects you can see both at home and in school? Draw and color these objects in the box below.



## Evaluate

Circle the object that you can use by yourself. Box the object that you should use with an adult.





# Extend

## My Home

How would you describe your home? Does it have different shapes? Does it have different colors? Using materials such as popsicle sticks, beads, cardboard, and coloring materials, make a small model of your home. Then, show the model you made in class and describe how it look likes using the properties you learned in class like shape, size, color, and texture.





## Rubric For Assessment

| Criteria                | 4<br>(Excellent)                                                                               | 3<br>(Good)                                                   | 2<br>(Satisfactory)                                                          | 1<br>(Needs Improvement)                                           |
|-------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Creativity</b>       | The model home is very creative and shows unique design features.                              | The model home is somewhat creative with some unique aspects. | The model home has a basic design with little creativity.                    | The model home lacks creativity and has a very plain design.       |
| <b>Neatness</b>         | The model is exceptionally neat with great attention to detail.                                | The model is neat with good attention to detail.              | The model is somewhat neat but could be tidier.                              | The model is messy and lacks neatness.                             |
| <b>Use of Materials</b> | Materials are used creatively and effectively, enhancing the model's appearance and structure. | Materials are used well, with a few creative touches.         | Materials are used adequately, but with limited creativity or effectiveness. | Poor use of materials, with little to no enhancement of the model. |

# QUARTER 2

When you step outside and look around, you can spot all sorts of living things like birds, trees, and even tiny bugs! These are all special treasures in our world that we need to take care of and love. In this fun journey we are about to start, you will get to discover amazing things about our bodies and the world we live in. You will learn cool facts about animals, plants, and their homes. Then, using what you have learned, you will help animals and plants stay safe and happy. Are you ready to dive into this awesome adventure?



# LESSON 1

## All About My Head



### Target

At the end of this lesson, you will be able to:

- ◇ Name the parts of the head.
- ◇ Describe the uses of each part of the head.
- ◇ Take care of the head.



### Engage



*What are the different parts and uses of the head?*



## My Head

### Objectives

- ◇ Identify the parts of the head and the uses of each part.

### Instructions from Interactive

#### A. Parts of the Head

Connect the name of each part of the head.

#### B. Some Uses of Parts of the Head

What part of the head is used with each object? Drag the object to its matching part. Then write the uses of each part in Table 1 below.

**binocular, food, music, microphone**

### Data

Table 1.

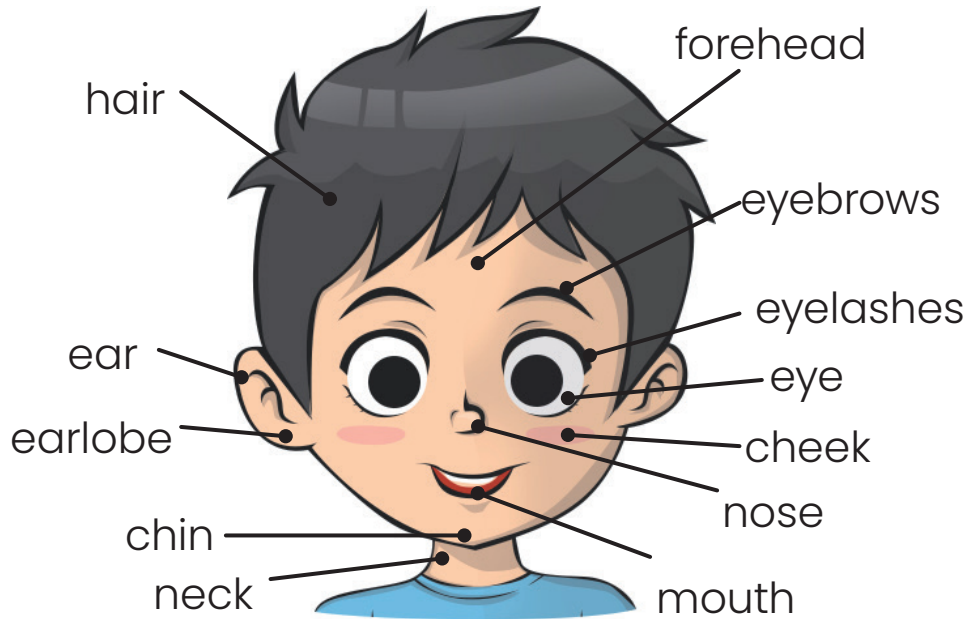
| Object     | Part of the Head Used |
|------------|-----------------------|
| binoculars |                       |
| food       |                       |
| music      |                       |
| microphone |                       |

## Guide Question

What will happen if one part of the head is missing?



## Explain



Study the figure above. What are the different parts of the head?

1. The **chin** is the part below the mouth.
2. The **cheeks** are the soft, squishy parts on the sides of your face.
3. The **nose** is used to smell things.
4. The **ears** are used to hear with.
5. The **eyes** are used to see things.
6. The **hair** is the soft, fluffy stuff on your head.

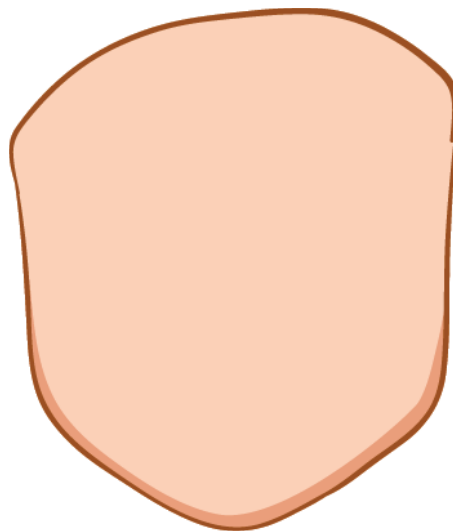
7. The **neck** is the part that connects your head to your body.
8. The **mouth** is used to speak and to chew food.

It is important to take care of our head. To keep it safe and healthy, you can do a few simple things. First, always wear a helmet when riding a bike or scooter to protect your head. Second, be careful not to bump your head on things. Lastly, wear a hat to protect your head from too much sun.



### Elaborate

Find a partner and draw each other's face. Draw lines to point to each part and label it correctly.



Parts of the Head



## Evaluate

Color the 😊 if the statement is true and ☹️ if false.

1. The chin is found on top of the face.



2. The eyes help us see things.



3. The ears help us hear sounds.



4. The neck connects the head to the body.



5. The mouth is where we eat and drink.





# LESSON 2

## Meet the Torso



### Target

At the end of this lesson, you will be able to:

- ◇ Name the parts of the torso.
- ◇ Describe the uses of each part of the torso.
- ◇ Take care of the torso.



### Engage



*What are the different parts and uses of the torso?*





## Explore

Access the interactive  
to perform the activity.



### My Torso

#### Objectives

- ◇ Identify the parts of the torso and the uses of each part.

#### Instructions from the Interactive

1. Scratch the rectangles for each level to reveal the actions taken by Cleo.
2. Identify what part of the torso is moving for each action.
3. Complete Table 1.

#### Data

Table 1

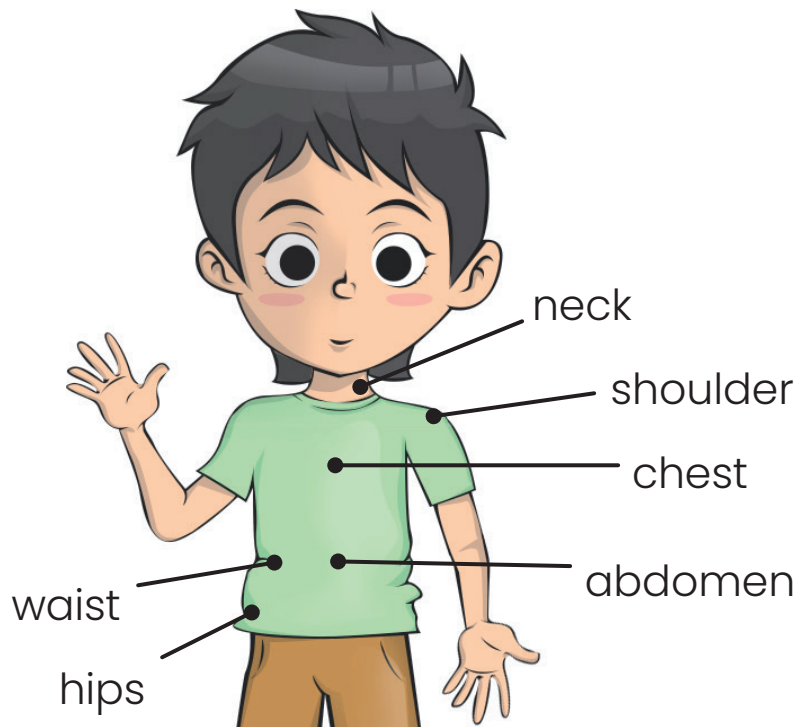
| Parts of the Torso | Actions Done |
|--------------------|--------------|
|                    |              |

## Guide Question

What makes the torso an important part of your body?



The **torso** is the middle part of the body.



1. The **neck** is the part that connects the head to the torso.
2. The **shoulder** connects the arms and the body.
3. The **chest** protects important organs like the heart and lungs.
4. The **abdomen** is below the chest.

5. The **waist** is between the chest and hips.
6. The **hips** are below the waist and connect the legs to the body.

Taking care of our torso is important. It is good to sit up straight to help your back stay strong. You should always wear comfortable clothes. And, do not forget to give your family and friends big hugs every day.



## Elaborate

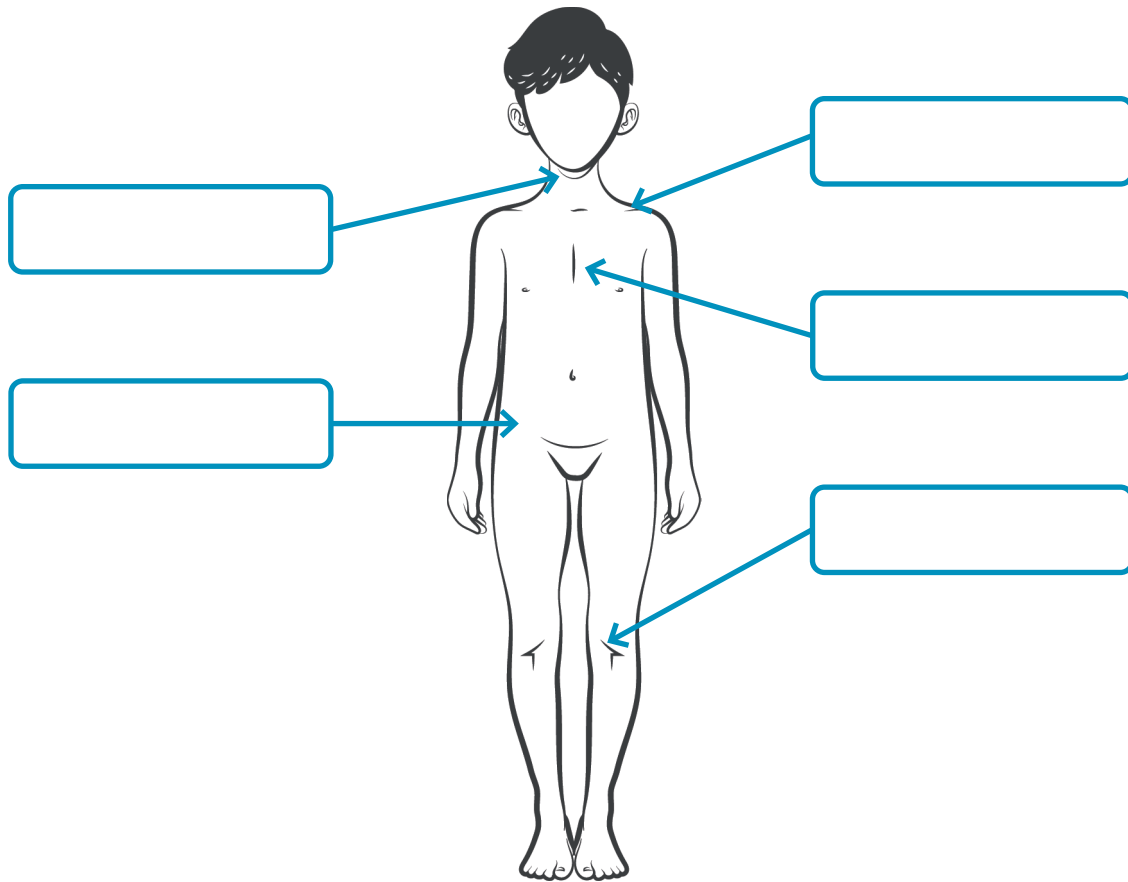
Find a partner and draw four actions that you can do with your torso.

|  |  |
|--|--|
|  |  |
|  |  |



## Evaluate

Label the parts of the torso and write their function on the blank provided. Choose your answer from the word box below.



Knee

Waist

Neck

Chest

Shoulder

# LESSON 3

## Lively Limbs



### Target

At the end of this lesson, you will be able to:

- ◇ Name the parts of the limbs.
- ◇ Describe the uses of each part of the limbs.
- ◇ Take care of the limbs.



### Engage



*What are the different parts and uses of the limbs?*



## My Limbs

### Objectives

- ◇ Describe the parts of the limbs and their functions.

### Instructions from the Interactive

#### A. Catching a Ball

1. Drag a ball in a workspace. Click and hold the object.
2. Follow the upward broken lines then release the ball.
3. Identify at least three parts of the limb moved by Lino to complete Table 1.

#### B. Kicking a Ball

1. Drag a ball in a workspace. Click and hold the object.
2. Follow the straight forward broken lines then release the ball.
3. Identify at least three parts of the limb moved by Lino to complete Table 1.

### Data

Table 1.

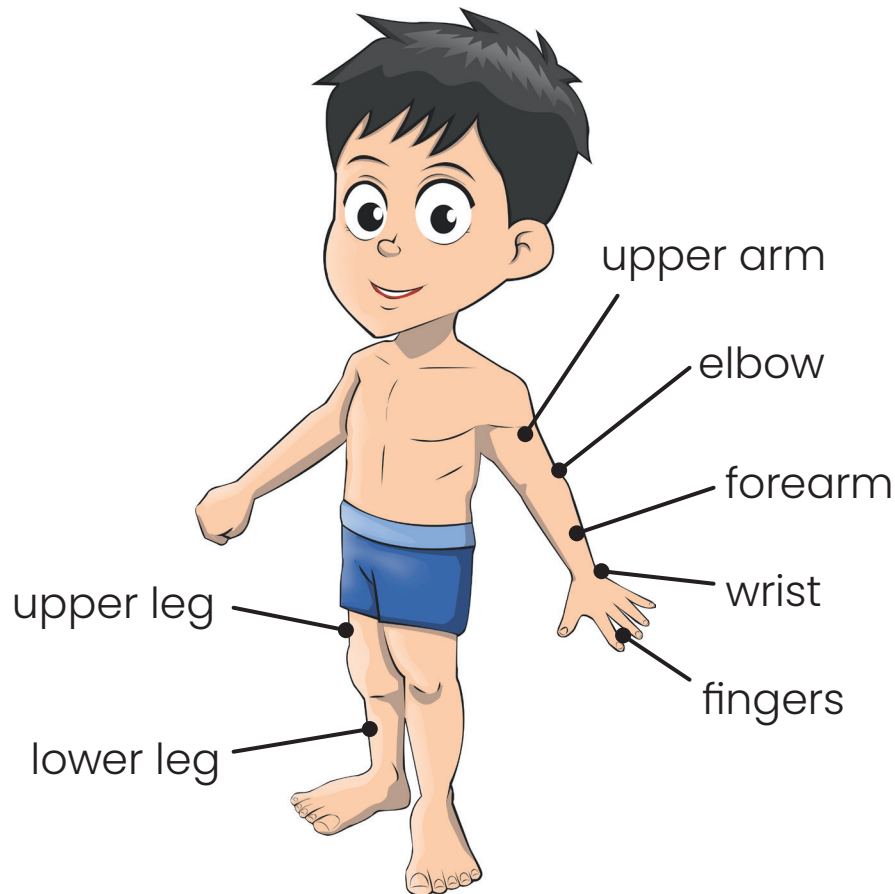
| Catching a Ball | Kicking a Ball |
|-----------------|----------------|
|                 |                |
|                 |                |
|                 |                |



## Explain

Our limbs help us do many things like walking, carrying stuff, holding things, playing games, and even dancing.

1. The **upper arm** connects the arm to the torso.
2. The **forearm** is below the upper arm.
3. The **elbow** is the part that allows the arm to move.
4. The **wrist** connects the hand and the forearm.



5. The **fingers** can bend, stretch, and move in circles.
6. The **upper leg** is also called the **thigh**. It is connected to the hips.
7. The **lower leg** connects the foot to the thigh.

It is important to take care of our limbs. First, you need to move and play every day to keep your arms and legs strong. Also, be careful when doing activities to avoid getting hurt. Lastly, you should always wash your hands to keep your limbs clean and healthy.



## Elaborate

Form a group of three. List three activities that you do every day which uses your limbs. Then, act out these activities in class.

| Activities That I Do Using My Limbs |
|-------------------------------------|
| 1.                                  |
| 2.                                  |
| 3.                                  |





## Evaluate

Is it part of the arm or the leg? Put a check (✓) in the correct box below..

|            | Part of the Arm          | Part of the Leg          |
|------------|--------------------------|--------------------------|
| 1. toes    | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. knee    | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. elbow   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. fingers | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. wrist   | <input type="checkbox"/> | <input type="checkbox"/> |

# LESSON 4

## Basic Needs of the Body



### Target

At the end of this lesson, you will be able to:

- ◇ Explain what basic needs mean.
- ◇ Identify the basic needs of the body.



### Engage



*What are the basic needs of the body?*



## Explore

Access the interactive  
to perform the activity.



# My Body Needs

## Objective

- ◇ Enumerate the basic needs of the body.

## Instructions from the Interactive

Isaac wants to know how to take care of his body. Help him discover what his body needs.

## Guide Question

What should Isaac do to take care of his body?



## Explain

**Basic needs** are the important things a person needs to live and survive. A child like you has different basic needs.



- We need clean and fresh **air** to survive.
- **Food** gives the body energy.
- **Water** keeps your body refreshed.
- **Clothes** protect your body from feeling too hot or too cold.
- **Shelter** is where people live.
- **Sleep** relaxes your body and gives it more energy.
- **Bathing** keeps your body clean and healthy.
- A young child needs **love and care** so they will not feel sad.



## Elaborate

Make a poster showing the different basic needs of the body. Do not forget to color your drawing. Then, explain your drawing in class.





## Evaluate

Put a check (✓) in the box if the given item is a basic need and a cross (✗) if not.

1. food

☐

2. toys

☐

3. shelter

☐

4. playground

☐

5. gadget

☐

# LESSON 5

## Healthy Habits



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what healthy habits are.
- ◇ Enumerate practices that are good for the body.



### Engage



*What are the healthy habits a child should do?*



## Explore

Access the interactive  
to perform the activity.



# Healthy Habits

## Objectives

- Identify the different practices that keep the body healthy.
- Distinguish healthy food from unhealthy food.

## Instructions from the Interactive

Marie wants to know what healthy habits she should have. Help her learn these habits by doing the task that will be flashed on the screen.

## Guide Questions

1. Why do we need to sleep at least 8 hours a day?
2. Give at least 5 healthy foods that you are eating.
3. How should you clean yourself when taking a bath?





## Explain

A **healthy habit** is any activity that keeps the body well and strong.

### A. Have a balanced diet.

A balanced diet helps a child grow bigger and stronger.



### B. Keep your body clean.

Keeping your body clean is important to stay healthy.



### C. Have enough rest.

Resting allows your body to recover the energy lost as you move. As a child, you should sleep at least 8 hours in a day.





## Elaborate

Form a group. Prepare a one-minute skit showing a healthy habit. After performing the skit, explain why it is important to form healthy habits.



## Evaluate

Color 😊 if the practice is a healthy habit. Color ☹️ if not.

1. Eating fruits and vegetables regularly



2. Taking a bath once a week



3. Keeping fingernails long



4. Sleeping late at night



5. Resting after playing outdoors



# LESSON 6

## Animal Around Us



### Target

At the end of this lesson, you will be able to:

- ◇ Give examples of animals found at home, in the farm, and in the forest.
- ◇ Identify ways to take care of animals properly.



### Engage



*What are the different animals that can be found at home, in the farm, and in the forest?*



## Explore

Access the interactive  
to perform the activity.



# Home of Animals

## Objectives

- Identify the animals according to the place where they live.
- Name the animals that are found at home, in a farm, and in the forest.

## Instructions from the Interactive

Gregor wants to know where he can find different animals around him. Help Gregor by guiding him around the maze.

## Guide Questions

1. Name the animals that are found at home, living in a farm, and in the forest.
2. Do you have any pets at home? If so, what are they? Write their names.



Some animals live together with humans. These animals are called **pets**.

Some examples are dogs, cats, and birds.



Some animals are found in the farm, too. A **farm** is a place where animals are raised.



Some examples are horses, pigs, and carabaos.

Some animals live in an area of land that is covered with trees. These animals are found in the **forest**.



Some examples are deer, tiger, and monkey.

Animals are important to people. But people are important to animals, too. People are expected to show care and love for the animals around them. There are different ways to take care of animals.

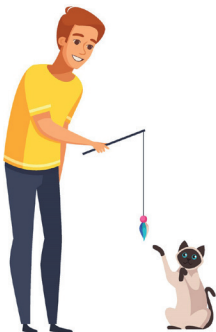


Feed your pets properly.



Keep your pets clean

Sometimes, animals get sick, too. When this happens, bring them to a veterinarian. A **veterinarian** is a doctor for animals.



Keeping your pet happy is important too! You should play with your pet to keep them happy.





## Elaborate

Bring a picture of your pet. If you do not have a pet, bring a picture of an animal that you want to take care of someday. Show the picture in front of the class. Explain why you like your pet and how you take care of it.



## Evaluate

Draw a colored circle around each animal:

**yellow** circle for the animal found at home  
**green** circle for the animal found in the farm  
**blue** circle for the animal found in the forest





# LESSON 7

## Plants Around Us



### Target

At the end of this lesson, you will be able to:

- ◇ Give examples of plants found in the community.
- ◇ Explain the different parts of plants.
- ◇ Identify ways to take care of plants properly.



### Engage



*How are plants different from each other?*





# Plants Everywhere

## Objectives

- Identify the different places where plants grow.
- Identify the plants that grow at home, in the neighborhood, and in the farm.

## Instructions from the Interactive

### A. Plants at Home

1. Select the Home icon.
2. Observe the place and select all the plants present.

### B. Plants in the Neighborhood

1. Select the “Main” button to return to the main page.
2. Select neighborhood icon.
3. Observe the place and select all the plants present.

### C. Plants in the Farm

1. Select the “Main” button to return to the main page.
2. Select the Farm icon.
3. Observe the place and select all the plants present.

## Guide Questions

1. What characteristics did you notice in plants that grow at home?
2. What characteristics did you notice in plants that grow in the neighborhood?

3. What characteristics did you notice in plants that grow in the farm?



## Explain

Some plants grow indoors like in homes. A plant that grows indoor is called a **houseplant**. People grow plants indoors to add beauty to their homes.



**Gardens** are seen in the neighborhood, too. Many flowering plants are found in the garden.

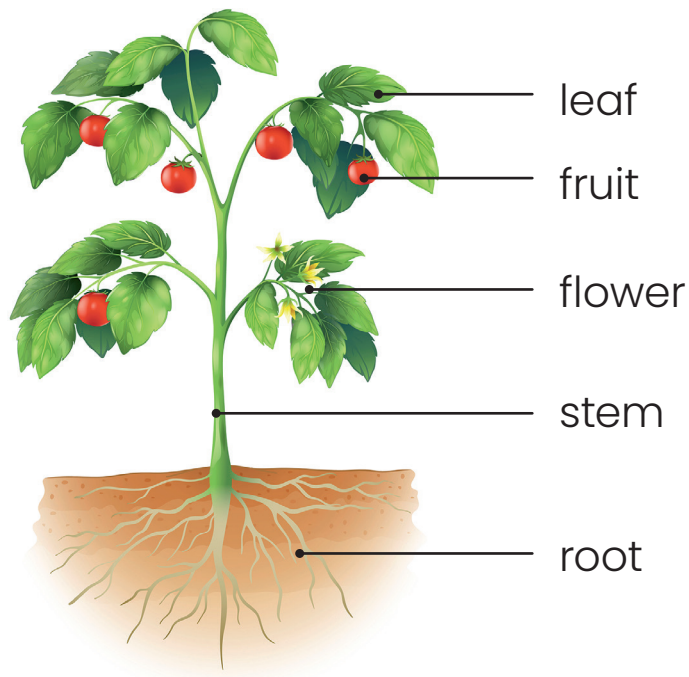


Different kinds of plants are also found in the **farm**. Plants in the farm are known as crops. **Crops** are plants that are grown for food.



Plants have different parts. Each part of the plant has a certain use.

### Parts of a Plant



The **roots** hold the plants in the soil. Plants stay on the ground because of the roots. These also sip water and nutrients which are important materials that keep the plant healthy.





The **stem** keeps the plant still and standing. It also holds other parts of the plant.

The **leaves** make plants appear to have different shapes or forms. Plants are also able to make their own food through their leaves.

Unlike animals, plants do not move from place to place. They sometimes need help to grow. People who benefit from plants must care for them, too. There are different ways to take care of plants.

Always water plants with the right amount.



Place plants where they can get sunlight.

Protect plants from weeds and pests.





## Elaborate

Find a partner. With your teacher, look around the campus and draw a plant that you found. Label the different parts of the plant in your drawing.



## Evaluate

Color 😊 if the person shows proper care for plants.

Color ☹️ if not.

1. Sam waters the plants until they drown.



2. Ron takes out indoor plants outside regularly for them to get sunlight.



3. Mr. Frank puts a fence around the plants to protect them from stray animals.



4. Wally pulls weeds around the plants.



5. Anna picks flowers or leaves from plants only when needed.







# Extend

Humans, animals, and plants all share this world and live together. Form a group. Using modeling clay and art materials, make a diorama showing humans, animals, and plants living together. A diorama is a small model showing a scene. Explain your output in class.





## Rubric For Assessment

| Criteria                     | 3<br>(Excellent)                                                                                                     | 2<br>(Satisfactory)                                                                                                  | 1<br>(Needs Improvement)                                                                              |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Accuracy</b>              | Includes detailed models of humans, animals, and plants. Colorful, neat, and accurately represents the theme.        | Basic models of humans, animals, and plants. Simple and could be neater, with some effort in representing the theme. | Incomplete or lacks clear models. Very simple or messy, with little effort in representing the theme. |
| <b>Creativity</b>            | Exceptional creativity in design and use of materials. Imaginative scenes with excellent use of colors and textures. | Some creativity but limited variety in materials. Simple scene with basic colors and textures.                       | Little to no creativity. Lacks variety and interest, with minimal use of colors and textures.         |
| <b>Explanation of Output</b> | Clear, detailed explanation of the diorama and relationships. Confident speaking and answers questions well.         | Basic explanation of the diorama may miss details. There is hesitation and struggles with questions.                 | Minimal or unclear explanation. Little confidence and struggles to answer questions.                  |
| <b>Teamwork</b>              | Actively participates and collaborates with team members. Shares ideas and materials well.                           | Some participation and collaboration but could engage more. Shares few ideas and materials.                          | Minimal participation and collaboration. Does not share ideas or materials effectively.               |

# QUARTER 3

When you play outside, you will encounter different objects that are moving. You will hear different sounds. You will see lights of different colors and feel warmth in your surroundings. We are going on a fantastic journey to explore these cool things: motion, sound, heat, and light. Then, with your new knowledge, you will get to work on an amazing project that shows others how awesome and important motion, sound, heat, and light are. Are you ready to start this thrilling exploration?



# LESSON 1

## On the Move



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the direction of a moving object.
- ◇ Describe how fast an object moves.



### Engage



*When is an object moving?*



## Move It

### Objective

- ◇ Describe the motion of objects.

### Instructions from the Interactive

#### A. Moving and At Rest

Look at the two arrows. Find out which one is moving and which one is at rest.

#### B. Rolling

Click the ball to see how an object rolls.

#### C. Objects Moving Around You

Click each object to see how it moves.

#### D. Direction of a Moving Object

Click each object to see where it will move.

#### E. Slow and Fast Objects

Click each object to see how fast it can move.

### Guide Questions

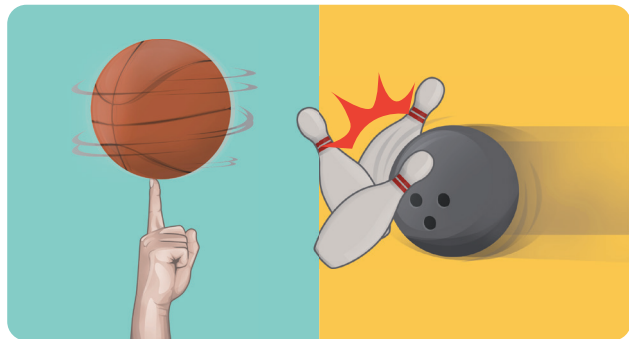
1. What are the objects that can roll?
2. What are the different movements an object can do?

3. What are the objects that move slowly?
4. What are the objects that can move fast?



The motion of an object can be along a straight-line path. It can also be along a circular path.

An object's motion can be described as spinning or rolling.



An object's motion can be described as fast or slow.



## Elaborate

Find a partner. On a piece of paper, draw an animal or object that moves fast and another animal or object that moves slow. Share your drawings in class.



## Evaluate

Tell whether the object is moving or at rest. Encircle the correct answer.

- |                                    |               |                |
|------------------------------------|---------------|----------------|
| 1. a pen lying on top of the table | <b>moving</b> | <b>at rest</b> |
| 2. a kite flying up in the air     | <b>moving</b> | <b>at rest</b> |
| 3. a bicycle standing by the door  | <b>moving</b> | <b>at rest</b> |
| 4. a painting hanging on the wall  | <b>moving</b> | <b>at rest</b> |
| 5. a top spinning on the floor     | <b>moving</b> | <b>at rest</b> |



# LESSON 2

## Sounds All Around



### Target

At the end of this lesson, you will be able to:

- ◇ Describe how sound is produced.
- ◇ Describe the sounds present around us.



### Engage



*What are the sounds you hear in the playground?*





## Sound

### Objective

- ◇ Describe the sounds around us.

### Instructions from the Interactive

#### A. How Sound Travels

Open the animation for how sound travels to your ears.

#### B. Vibrations

Hit the tuning fork and see what happens.

#### C. Sounds at Home

Shake the object that produces sound at home.

#### D. Sounds from the Neighborhood

Match the sound with the picture.

#### E. Sounds Away from Home

Match the sound with the picture.

#### F. Sounds in the Forest

Listen to the sound produced. Drag the object that makes that sound to the green space on the screen.

### Guide Questions

1. How does sound travel to your ears?
2. What happens when you strike the tuning fork?



## Explain

Sound is created by **vibrations**. When you pluck a rubber band and feel it wiggle back and forth really fast, you are observing vibrations.



You can hear different sounds at home. You can hear the songs from the TV, the ticking of the clock, and the sound of food cooking in the kitchen.

You can hear different sounds in the neighborhood. You can hear people talking, children playing, and cars passing by.



You can hear different sounds when you are away from home. You can hear the rustling of leaves, the crashing of waves, and the chirping of birds.



## Elaborate

Form a group. Go outside the classroom and listen to the sounds that you can hear. List the sounds that you can hear. Find where the sound is coming from. Write your answers in the table below.

| Sounds That I Can Hear | Where Is It Coming From? |
|------------------------|--------------------------|
|                        |                          |



## Evaluate

Tell the place where you can most often hear the given sound. Circle the correct answer.

- |                          |        |        |              |
|--------------------------|--------|--------|--------------|
| 1. squeaking insects     | forest | home   | neighborhood |
| 2. honking cars          | beach  | forest | neighborhood |
| 3. splashing water waves | beach  | home   | neighborhood |
| 4. rustling leaves       | forest | home   | neighborhood |
| 5. laughing children     | beach  | home   | neighborhood |

# LESSON 3

## Soft and Loud Sounds



### Target

At the end of this lesson, you will be able to:

- ◇ Describe soft and loud sounds.
- ◇ List objects that can produce soft or loud sounds.



### Engage



*What kind of music do you like to listen to?*



Access the interactive  
to perform the activity.



## Loud or Soft

### Objective

- ◇ Describe soft and loud sounds.

### Instructions from the Interactive

#### A. Loud Sound

1. Match the source of sound with the sound produced.
2. Drag the speaker icon to the source of the sound.

#### B. Soft Sound

1. Match the source of sound with the sound produced.
2. Drag the speaker icon to the source of the sound.

#### C. Soft and Loud Sounds in the Environment

1. Put the object that produces the loud sound to the red space on the screen.
2. Put the object that produces the soft sound to the blue space on the screen.

### Guide Questions

1. How do you describe a loud sound?
2. How do you describe a soft sound?



## Explain

Some objects produce **soft sounds**.

An example is a harp or a whisper.



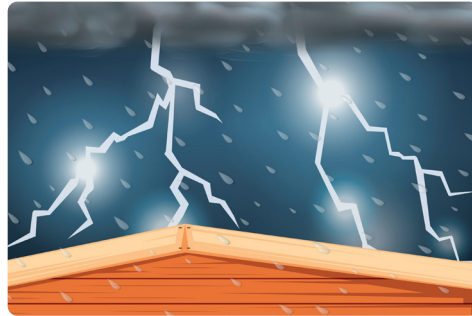
Some objects produce **loud sounds**.

An example is the siren of an ambulance.





There are soft and loud sounds in the environment, too. Some examples are the chirping of birds and the sound of thunder.



## Elaborate

Find a partner. Think of soft and loud sounds that you can hear at home, in school, and in your neighborhood. Write your answers in the table below.

| Soft Sounds | Loud Sounds |
|-------------|-------------|
|             |             |



## Evaluate

Tell if the object produces a soft sound or a loud sound.  
Circle the correct answer.

1. A strong lightning strike

**Soft sound    Loud sound**

2. Ambulance passing by

**Soft sound    Loud sound**

3. Mommy humming baby to sleep

**Soft sound    Loud sound**

4. Alarm to signal recess time

**Soft sound    Loud sound**

5. Flowing water from the kitchen faucet

**Soft sound    Loud sound**

# LESSON 4

## Light It Up



### Target

At the end of this lesson, you will be able to:

- ◇ Describe how light travels.
- ◇ Explain characteristics of light.



### Engage



*How are we able to see an object?*



## How Light Travels

### Objective

- ◇ Determine what color objects are when given light.

### Instructions from the Interactive

1. Point a white beam on differently-colored objects. What color do you see? Try other colors of the beam.
2. Observe and record the color of the objects under the beam. Complete Table 1.

### Data

**Table 1.** Colors You Can See

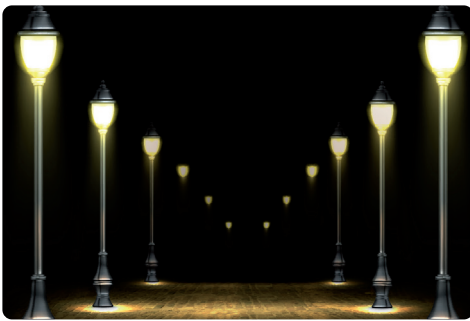
| Color of Object | Color of Light | Color that You Can See |
|-----------------|----------------|------------------------|
| Red apple       | White          |                        |
| Green leaf      | White          |                        |
| Blue Teddy Bear | White          |                        |
| Red Suitcase    | Blue           |                        |
| Yellow Raincoat | Red            |                        |

### Guide Questions

1. What color did you see when the object was under a white light?
2. What color did you see when the object was under a different colored light?

## What Is Light?

**Light** is energy that helps us see everything around us. It comes from the sun, light bulbs, and even fireflies at night. Light is very important because it lets us see colors and shapes, and helps plants grow.



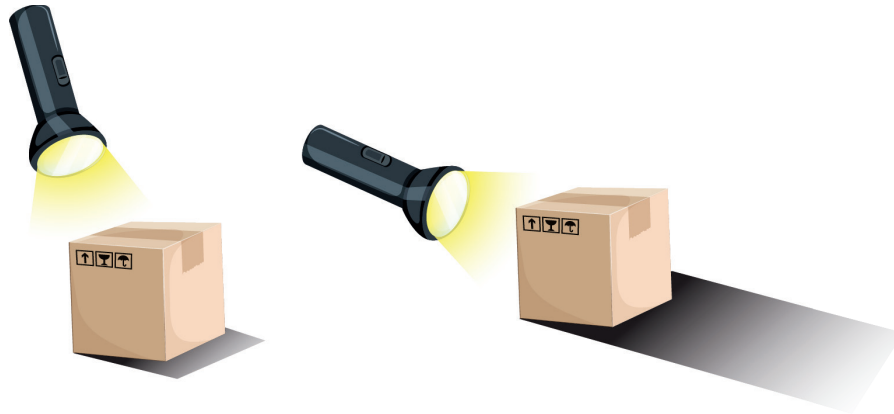
## How Does Light Travel?

Light travels very fast and in straight lines.



## What Happens When Light Is Blocked?

When something blocks the light, it creates a **shadow**. You can see your shadow on a sunny day. The shape of the shadow looks like the thing blocking the light.



## Elaborate

Find a partner. Think about the things that we can do at night because of light. Write it in the table below.

## Things I Can Do at Night Because of Light



## Evaluate

Put a check  on the blank if the statement is correct or a cross  if incorrect.

- \_\_\_\_\_ 1. Light helps us see things.
- \_\_\_\_\_ 2. Light comes from the sun.
- \_\_\_\_\_ 3. Light travels very slow.
- \_\_\_\_\_ 4. Light travels in a straight line.
- \_\_\_\_\_ 5. When light is blocked, there would be a shadow.



# LESSON 5

## Sources of Light



### Target

At the end of this lesson, you will be able to:

- ◇ Identify sources of light in our surroundings.
- ◇ Explain the uses of light.



### Engage



*What objects can give us light?*



## Sources and Uses of Light

### Objective

- ◇ Identify the sources and uses of light.

### Instructions from the Interactive

#### A. Objects That Make Use of Light

Click the image that makes use of light.

#### B. Sources of Light

1. Turn on the icon “Day Time” and observe what happens to the surroundings.
2. Turn on the icon “Night Time” and observe what happens to the surroundings.

### Guide Questions

1. What are the objects that make use of light?
2. What is the source of light during the daytime?  
During nighttime?
3. How important is light to us?



## Explain

### What Are the Sources of Light?

Light comes from different places and things. These are called **sources of light**. Here are some of them:

#### The Sun

It shines in the sky during the day and gives us light and warmth.



#### Light Bulbs

We use light bulbs to see when it is dark inside our homes and schools.

#### Candles and Lamps

Before there were electric lights, people used candles and oil lamps to light up their homes.





## **Stars**

You can see stars twinkling in the sky at night.

Light is very important in our daily lives. Here are some ways we use light:

### **Seeing Things**

The most important use of light is to help us see. Without light, it would always be dark, and we would not be able to see anything.

### **Staying Safe**

Light helps us stay safe. Streetlights make roads bright at night. Flashlights help us see when it is dark.

### **Making Food for Plants**

Plants need sunlight to make food and to grow. This is important for us because plants give us food and fresh air.

### **Learning and Reading**

Light lets us read books and see what we are writing. It is important in schools and libraries.



## Elaborate

List all the sources of light that you have at home. Write your answers in the table below.

| Sources of Light at Home |
|--------------------------|
|                          |



## Evaluate

Draw a happy face ☺ on the line if the statement is correct or a sad face ☹ if incorrect.

- \_\_\_\_\_ 1. The moon gives us light during the day.
- \_\_\_\_\_ 2. We use light bulbs to see when it is dark.
- \_\_\_\_\_ 3. People use candles when there is no electric light.
- \_\_\_\_\_ 4. Streetlights make roads bright at night.
- \_\_\_\_\_ 5. Sunlight helps plants make their food.



# LESSON 6

## Hot or Not



### Target

At the end of this lesson, you will be able to:

- ◇ Explain what heat is.
- ◇ Identify if objects are hot or cold.



### Engage



*What do you feel when you are near a fire?*



## Explore

Access the interactive  
to perform the activity.



### Hot or Cold

#### Objective

Identify if objects are hot or cold.

#### Instructions from the Interactive

1. Point to the object and read what it is.
2. Drag the object into the box labeled *Hot* if it is hot.
3. Drag the object into the box labeled *Cold* if it is cold.
4. Answer the guide questions that follow.

#### Data

| Hot Objects | Cold Objects |
|-------------|--------------|
|             |              |

#### Guide Questions

1. How can you know if an object is hot or cold?
2. Why is important to know if an object is hot or cold?



What is Heat?

**Heat** is a kind of energy that makes things warm. You can feel heat when you are in the sunshine, sitting near a fire, or drinking warm milk. Heat comes from different things and can change how we feel.



Things around us can be hot or cold.

Hot things have a lot of heat, like a cup of hot cocoa.



Cold things have less heat, like an ice cream cone.

It is important to know the difference between hot and cold objects so we can be safe and comfortable.



## Elaborate

Draw your favorite food that is hot and your favorite food that is cold. Color your drawings and share them in class.

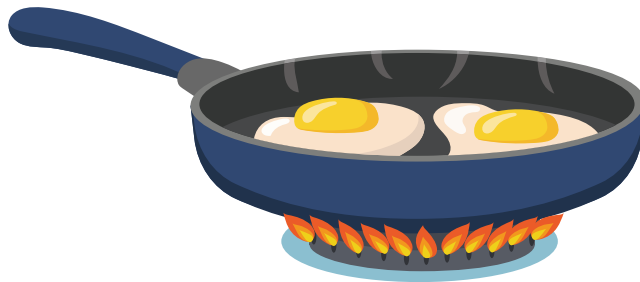
My Favorite Hot Food

My Favorite Cold Food



## Evaluate

Encircle the objects that are hot and box the objects that are cold.



# LESSON 7

## Sources and Uses of Heat



### Target

At the end of this lesson, you will be able to:

- ◇ Identify the different sources of heat in our surroundings.
- ◇ Explain why heat is important.
- ◇ List ways to keep safe from heat.



### Engage



*How are our meals cooked?*



Access the interactive  
to perform the activity.



## Uses of Heat

### Objective

Identify the uses of heat.

### Instructions from the Interactive

1. Hang the clothes to dry on the clothesline.
2. Bring the fire's intensity higher.
3. Cook the meat.
4. Fill the gas tank.
5. Once all the tasks are done successfully, a discussion of the uses of heat will appear.

### Guide Questions

1. What are the uses of heat?
2. Why is heat important to us?



## Explain

Heat comes from different places and things. Let us learn about where we find heat:

### The Sun

The sun is a big, bright star that gives us light and heat. It makes our days warm.



### Fire

Fires, like in fireplaces or when camping, give off heat. We use them to stay warm or to cook food.

### Appliances

Things in our home like ovens, toasters, and heaters create heat to cook food or warm up rooms.





## Our Bodies

Our bodies also make heat. That is why we feel warm.

Heat is very useful in our daily lives. Here are some ways we use it:

## Staying Warm

Heat keeps us cozy in cold weather.

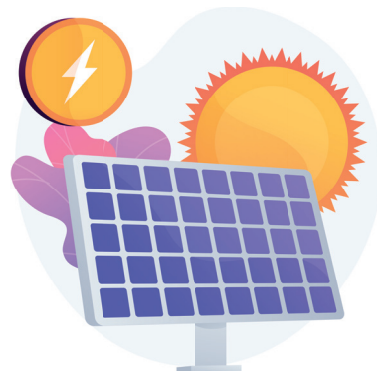


## Cooking Food

Heat helps us cook yummy foods like pancit, fried fish, and pizza.

## Making Electricity

Solar panels use heat to make electricity, which powers lights, TVs, and computers.





## Helping Plants Grow

The heat from the sun helps plants grow by giving them energy to make food.



## Drying clothes

Heat dries clothes that we just washed.



## Elaborate

Act out in class the things that you do to keep yourself warm during cold or rainy days.





## Evaluate

Color the thumbs up  if the statement is correct or the thumbs down  if it is incorrect.



1. The sun gives us heat during the day.



2. Our bodies do not give heat and that is why we are cold.



3. Heat helps us cook food.



4. Heat is also needed by plants to grow.



5. We can dry our clothes with the heat of the sun.



## Extend

Many children like you are already exposed to gadgets such as mobile phones or tablets. Too much time with gadgets can cause harm because of its sound and light. Form a group. Draw a poster showing the rules that children like you should follow when using gadgets. Show your poster in class. Explain to your classmates the rules that your group has thought of.



## Rubric For Assessment

| Criteria                    | 3<br>(Excellent)                                                                                                      | 2<br>(Satisfactory)                                                                                        | 1<br>(Needs Improvement)                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Poster Design</b>        | Poster is visually appealing with clear, creative illustrations. Information is well-organized and easy to read.      | Poster is somewhat organized but lacks creativity in design. Information can be harder to read.            | Poster is cluttered, lacking in creativity and organization. Information is difficult to read.                   |
| <b>Content Accuracy</b>     | All rules for gadget use are accurate, clearly stated, and cover essential aspects of safety and health.              | Rules are somewhat accurate but may miss important details or clarity.                                     | Rules are inaccurately stated, missing, or too vague to be useful.                                               |
| <b>Creativity</b>           | Shows exceptional creativity in the presentation of rules and use of materials. The poster is engaging and memorable. | Shows some creativity, but the presentation of rules could be more engaging.                               | Little to no creativity. The poster is not engaging or memorable.                                                |
| <b>Explanation of Rules</b> | Provides a clear, detailed explanation of each rule on the poster. Speaks confidently and engages the audience.       | Provides a basic explanation of the rules. May show some hesitation and less engagement with the audience. | Provides minimal or unclear explanations of the rules. Shows little confidence and engagement with the audience. |

| Criteria | 3<br>(Excellent)                                                                                                         | 2<br>(Satisfactory)                                                                                | 1<br>(Needs Improvement)                                                                |
|----------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Teamwork | Actively participates and collaborates with team members throughout the project. Shares ideas and materials effectively. | Shows some participation and collaboration but could engage more. Share a few ideas and materials. | Minimal participation and collaboration. Does not share ideas or materials effectively. |

# QUARTER 4

In this quarter, let us explore how the sun makes our days sunny and warm, how clouds bring gentle rain to water plants, and how wind makes leaves dance. We will also learn about stormy days and the night sky, filled with twinkling stars and the glowing moon. This journey will show us the amazing science behind sunny, rainy, windy, cloudy, and stormy days, and the mysteries of the sun, moon, and stars. Are you ready to discover the wonders of our weather and the sky above us?





# LESSON 1

## Sunny Day



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what a sunny day is.
- ◇ List the activities that can be done on a sunny day.
- ◇ Describe what to wear on a sunny day.



### Engage



*What do you like to do on a sunny day?*





## Sunny Day

### Objective

- ◇ Describe what sunny weather is.

### Instructions from the Interactives

#### A. What Fine Weather Is

Put all the elements of fine weather into the working space. The elements are found in the Materials Area.

#### B. Accessories Under the Sun

Pick and drag the items to the person who is under the sun.

#### C. Food on a Hot Day

On the table, place all the food that makes you feel refreshed on a hot day.

### Guide Questions

1. What factors make a day sunny?
2. What things do you wear when it is sunny outside?
3. What food do you eat on a sunny day?



## Explain

**Sunny weather** is also known as **fine weather**. The sun shines brightly on a sunny day. Wearing light clothes can make you comfortable on a hot day. Some wear sunglasses to protect their eyes.

There are many activities that may be done on a sunny day.



hiking



swimming



## Elaborate

Form a group. Perform a one-minute skit to show what you like to do on a sunny day.



## Evaluate

Draw clothes and items that people should wear on a sunny day. Color your drawing.

# LESSON 2

## Cloudy Day



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what a cloudy day is.
- ◇ List the activities that can be done on a cloudy day.
- ◇ Describe what to wear on a cloudy day.



### Engage



*What do you like to do on a cloud day?*



## Cloudy Day

### Objective

- ◇ Describe what cloudy weather is.

### Instructions from the Interactives

#### A. What Cloudy Weather Is

Put all the elements of cloudy weather into the working space. The elements are found in the Materials Task Pane.

#### B. What to Wear

Pick and drag the clothes the person should wear when the weather is cloudy.

#### C. Activities

Choose indoor activities on a cloudy day.

### Guide Questions

1. What factors make a day cloudy?
2. What should be worn on a cloudy day?
3. What are the indoor activities you can do on a cloudy day?



## Explain

There are plenty of clouds in the sky on a **cloudy day**. The clouds cover the sun, making it appear like it is hidden. There is also some chance of rain on a cloudy day.

On a cloudy day, you may do activities inside or outside your home.



going on a picnic



riding a bike



## Elaborate

Draw an activity you like to do on a cloudy day. Color your drawing.





## Evaluate

On the blank, draw  if the sentence describes cloudy weather. Do not draw anything if the sentence does not describe cloudy weather.

- \_\_\_\_\_ 1. The sun is covered on a cloudy day.
- \_\_\_\_\_ 2. The weather is very cold on a cloudy day.
- \_\_\_\_\_ 3. The wind blows very strong on a cloudy day.
- \_\_\_\_\_ 4. The sun shines brightly on a cloudy day.
- \_\_\_\_\_ 5. Only activities inside your home may be done on a cloudy day.

# LESSON 3

## Windy Day



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what a windy day is.
- ◇ List the activities that can be done on a windy day.
- ◇ Describe what to wear on a windy day.



### Engage



*What do you like to do on a windy day?*



## Explore

Access the interactive  
to perform the activity.



# Windy Day

## Objective

- ◇ Observe the effects of wind in the surroundings.

## Instructions from the Interactive

1. Drag the slider up and down to change the strength of the blowing wind.
2. Observe the effects of the wind on the surroundings.

## Guide Questions

1. What are the effects of strong winds?
2. Do you like windy days? Why or why not?



**Wind** is air moving. Winds blow strongly on a **windy day**. Trees may sway and leaves are blown away. Dust and dirt fly around. Wearing a face mask will keep you from breathing the dust and dirt. Windy days may also bring cool air. You can wear a scarf to keep you warm.

On a windy day, you can fly kites outside. If the wind is too strong, you may also play inside your home with friends and family.



Flying a kite



Playing inside your home with loved ones



## Elaborate

Draw what you should wear on a windy day. Color your drawing.



## Evaluate

Put a ✓ on the space if the sentence talks about a windy day or ✗ if not.

- \_\_\_\_\_ 1. Wind is air that is moving.
- \_\_\_\_\_ 2. You can fly a kite on a windy day.
- \_\_\_\_\_ 3. Stay at home if the wind is very strong.
- \_\_\_\_\_ 4. Dust and dirt fly around on a windy day.
- \_\_\_\_\_ 5. You cannot play outside on a windy day.

# LESSON 4

## Rainy Day



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what a rainy day is.
- ◇ List the activities that can be done on a rainy day.
- ◇ Describe what to wear on a rainy day.



### Engage



*What do you like to do on a rainy day?*





## Rainy Day

### Objective

- ◇ Describe what rainy weather is.

### Instructions from the Interactive

#### A. What Rainy Weather Is

Put all the elements of rainy weather on the working space. The elements are found in the Materials Task Pane.

#### B. What to Wear

Pick and drag the clothes the person should wear when the weather is rainy.

#### C. Activities

Choose indoor activities on a rainy day.

### Guide Question

1. What makes up rainy weather?
2. What should be worn on a rainy day?
3. What are the indoor activities on a rainy day?



## Explain

The sky is dark and cloudy on a **rainy day**. The weather may be cold when it is raining. People use an umbrella or raincoat and boots to keep from getting wet.

There is occasional **lightning** or streaks of light in the sky on a rainy day. A **thunder** or a loud rolling sound from the sky may be heard, too. People prefer to stay inside their homes when it is raining. They prefer to eat something warm while spending time with friends and family.



People use umbrellas and wear raincoats during rainy days.



It is nice to eat warm food during rainy days.



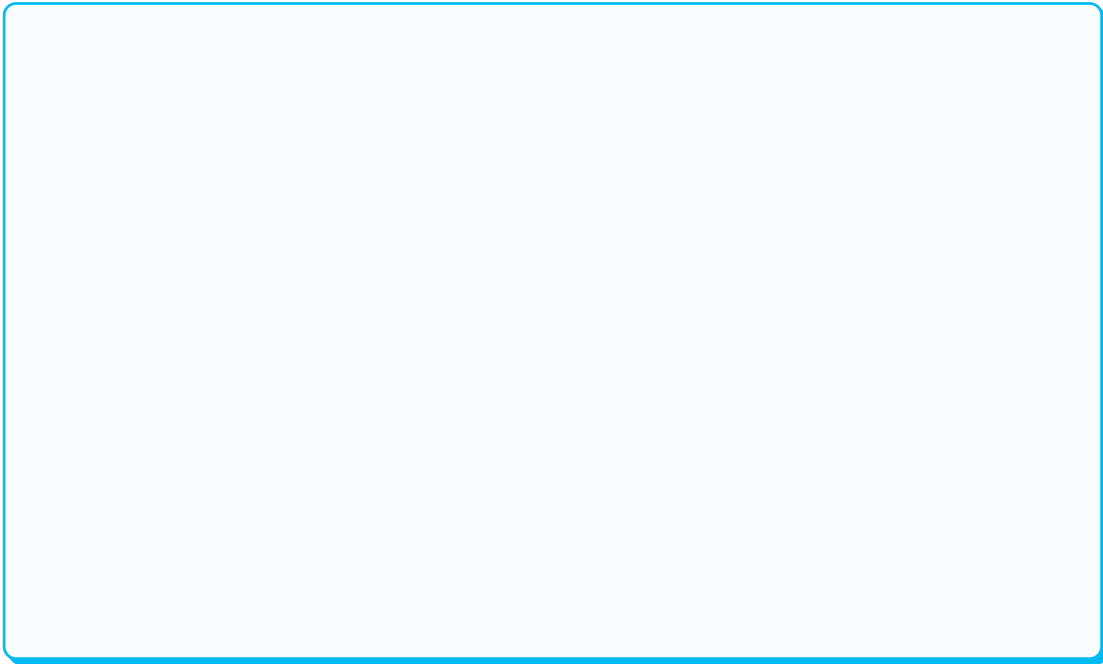
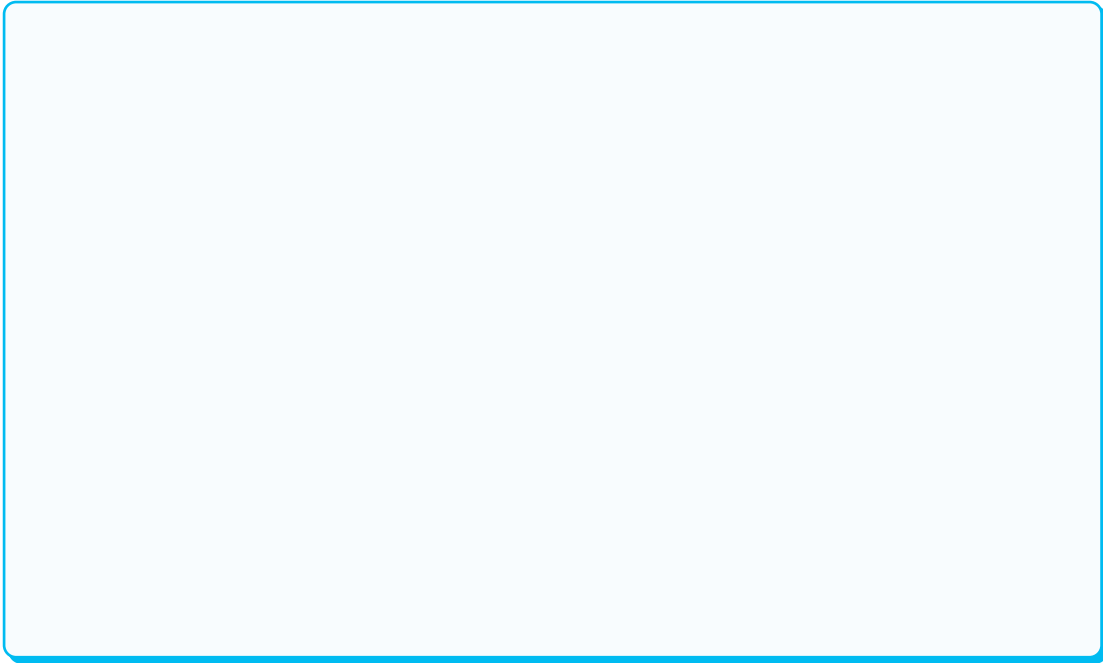
## Elaborate

Form a group. Draw what you should wear on a rainy day. Cut out your drawings and present your work in class. Be careful when using the scissors.



## Evaluate

What are some activities you do on a rainy day? Ask three of your classmates. Draw their answers on the space provided.



# LESSON 5

## Stormy Day



### Target

At the end of this lesson, you will be able to:

- ◇ Describe what a stormy day is.
- ◇ List the activities that can be done on a stormy day.
- ◇ Describe what to wear on a stormy day.



### Engage



*How would you describe a storm?*



## Explore

Access the interactive  
to perform the activity.



# Stormy Day

## Objective

- ◇ Describe what stormy weather is.

## Instructions from the Interactive

### A. What Stormy Weather Is

Put all the elements of stormy weather on the working space. The elements are found in the Materials Task Pane.

### B. What to Bring in Case of Evacuation

Pick and drag the important materials you should bring in case you need to evacuate. Drag these materials out of the door.

## Guide Questions

1. What makes up stormy weather?
2. What should be brought in case of evacuation?



**Stormy weather** is very different from rainy weather. In stormy weather, the wind is very strong. The rain pours almost all day. A **flash flood** happens when the water goes up quickly. Some people **evacuate** or transfer to a safer place even before flooding happens.



Heavy rains and strong winds happen on a stormy day.

It is better to stay home during stormy weather. Classes are usually suspended to keep children safe. You can stay dry inside your home and play or read books. Wearing a sweater can protect you from the cold. It is also nice to eat warm food. When storms are very strong, it is good to stock up on food, water, and medicines.



Stay at home on a stormy day.





## Elaborate

Form a group. Perform a one-minute skit to show what to do and what to wear on a stormy day.



## Evaluate

Draw five things that you need to prepare on a stormy day. Color your drawing.

# LESSON 6

## Let Us Be Weather Safe



### Target

At the end of this lesson, you will be able to:

- ◇ Explain ways to keep safe from different kinds of weather.



### Engage



*How do you make yourself safe in any kind of weather?*



## Explore

Access the interactive  
to perform the activity.



### Help!

#### Objective

- ◇ Tell how weather can make us sick.

#### Instructions from the Interactive

With your teacher, do the activity and answer the guide questions.

#### Guide Question

What happens to our bodies when the weather changes? Match the pictures.



•

•

•

•



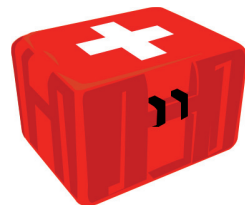
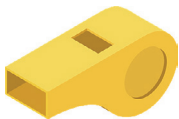


## Explain

Here are some things you can wear in different weather. Wearing them helps keep you safe.

|           |                                                                                                                                                                                                                                                                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sunny day |                                                                                           |
| Windy day |                                                                                                                                                                             |
| Rainy day |     |

On a stormy day, it is better to stay indoors. Wear a jacket if you feel cold. It is also best to prepare an emergency kit.





## Elaborate

Find a partner. Share with each other what you do to keep safe in different weather.



## Evaluate

What other items can you wear or prepare for each kind of weather? Draw them in the boxes.



# LESSON 7

## Sun, Moon, and Stars



### Target

At the end of this lesson, you will be able to:

- ◇ Describe the objects that we can see in the sky at daytime.
- ◇ Describe the objects that we can see in the sky at nighttime.



### Engage



*What can you see in the sky during the day? How about at night?*





# Daytime and Nighttime Sky

## Objective

- ◇ Describe what you can see in the sky during the day and at night.

## Instructions from the Interactive

1. Click on the “Day” button.
2. Observe the sky carefully and read the descriptions of the objects that you can find.
3. Click on the “Night” button.
4. Observe the sky carefully and read the descriptions of the objects that you can find.

## Guide Questions

1. What can you see in the daytime sky?
2. What can you see in the nighttime sky?



## What We Can See at Daytime

If the sky is clear, we can see the **Sun**. The Sun gives us light and heat. Be careful not to look at the Sun directly.



We can also see **clouds** in the sky, especially during a cloudy day.

## What We Can See at Nighttime

At night, we can see the **Moon**. The Moon may look different each night.



When the sky is clear, we can also see **stars**.



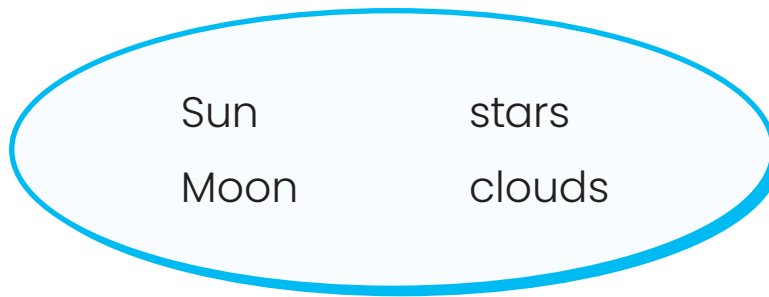
## Elaborate

Look out in the night sky. Draw what you can see inside the box below.



## Evaluate

Identify if the words inside the circle can be found in the sky during the day or at night. Write it in the correct box below.



Objects in the Sky  
at Daytime

Objects in the Sky  
at Nighttime



## Extend

Our country experiences a lot of storms every year. It is important to always be prepared. In this performance task, you will prepare an emergency kit that contains important things you will need when there is a storm or natural disaster. Put the contents of your emergency kit in a safe bag and show them in class. Share why you chose to include the things found in your emergency kit.



## Rubric For Assessment

| Criteria                         | 3<br>(Excellent)                                                                                         | 2<br>(Satisfactory)                                                                                                 | 1<br>(Needs Improvement)                                          |
|----------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>Contents of Emergency Kit</b> | Includes all essential items needed during a storm or natural disaster, with explanations for each item. | Includes most essential items needed during a storm or natural disaster, with some explanations for selected items. | Missing important items or lacks explanations for included items. |
| <b>Organization</b>              | Contents are neatly organized and packed in a safe bag.                                                  | Contents are somewhat organized in the bag, but may be slightly cluttered.                                          | Contents are disorganized or poorly packed.                       |
| <b>Presentation</b>              | Clearly presents the emergency kit to the class.                                                         | Presents the emergency kit to the class with some clarity.                                                          | Presents the emergency kit with minimal clarity or confidence.    |