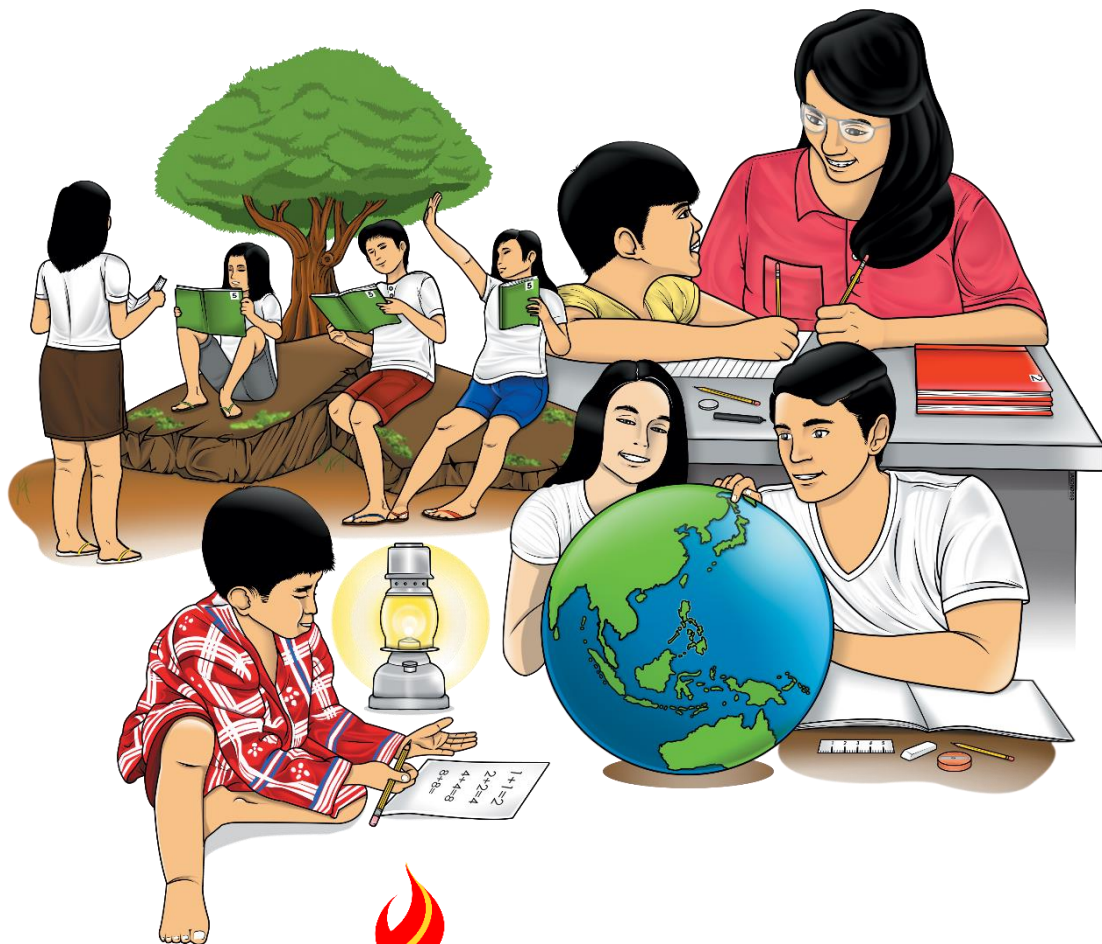


Science

Quarter 4 – Module 5: “Safety Precautions during Different Weather Conditions”



Science – Grade 4
Alternative Delivery Mode
Quarter 4 – Module 5: “Safety Precautions during Different Weather Conditions”
First Edition, 2020

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Science

**Quarter 4 – Module 5:
“Safety Precautions
during Different Weather
Conditions”**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written for you to help you understand the different safety precautions during different weather conditions, and to be familiarized with the different storm warning signals. In this module, you are going to do activities that will help you deal with different weather conditions that you are going to experience in your everyday life.

The module will focus on:

- **Lesson 1** – Making Simple Interpretations about the Weather
(S4ES-IVf-7)
- **Lesson 2** – Identifying Safety Precautions during Different Weather
(Conditions-S4ES-IVf-8)

After going through this module, you are expected to be able to:

1. identify safety precautions during sunny days, rainy days, and windy days;
2. describe the characteristics of each storm warning signal; and
3. identify safety precautions before, during, and after a typhoon.



What I Know

A. Directions: Draw a happy face (😊) if the statement is correct and a sad face (☹) if it is not. Do it in your science notebook.

- ___ 1. It is not good to burn dried leaves on windy day.
- ___ 2. On a stormy day, it is better to play in the rain.
- ___ 3. It is not good to expose yourself to too much heat of the sun.
- ___ 4. During sunny days, we should wear thin clothes to feel comfortable.
- ___ 5. It is good to eat cold foods and drinks during cold weather to keep our body warm.

B. Directions: Identify the possible storm warning signal shown in each picture.

1.



3.



2.



Illustrated by: Kristal Grace C. Ila

You are on the right track now. Keep going.

Lesson

1

“Safety Precautions During Different Weather Conditions”

Observing weather conditions help us predict the type of weather coming ahead and decide what suited activities can be done. Weather changes from time to time. Sometimes weather can cause harm so safety precautions are needed to keep us safe.

In this module, you will be provided with various activities that will enhance your insights in identifying safety precautions during different weather conditions. You will also be introduced to the different storm warning signals that will help you to be safe during times of calamity. Good luck and have a meaningful learning!



What's In

A. Directions: Write **true** if the statement is correct and **false** if it is not. Write your answers in your science notebook.

- ___ 1. Thermometer is used to measure the air temperature.
- ___ 2. Rain gauge is used to measure the amount of rainfall that has fallen over a specific period of time.
- ___ 3. Observing the weather condition won't help us decide the kind of activities we will do for the day.
- ___ 4. Changing weather condition will help us decide what clothes to wear and what food to eat.
- ___ 5. Weather charts tell about weather components at any given time.



What's New

Note to Parent/Guardian: Guide your children in doing this activity and answer the following questions.

To the Learner:

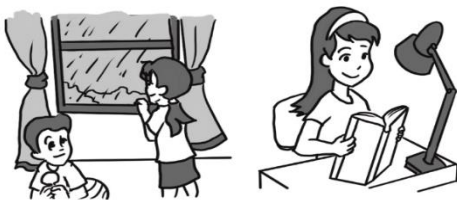
Activity 1: “How Can You Be Safe?”

Directions: Identify what safety precautions are being illustrated in the following pictures below. Write your answer in your science notebook.

1.



2.



3.



Illustrated by: Kristal Grace C. Ilaos

4.



5.



Illustrated by: Kristal Grace C. Ilao

Guide Questions:

1. What are the things/activities that you are going to do during sunny days? windy days? and rainy days?
2. What are the activities you should not do during these kinds of weather?

Activity 2: “Do You Know Me?”

Directions: Match the situations given below to the appropriate storm warning signal it describes. Fill these situations into the appropriate column on the table. Write your answer in your science notebook.

Situations:

Electrical power and communication services are disrupted.

Classes in preschool, elementary and high school levels in all public and private schools in affected areas are suspended.

People should seek shelter in strong buildings, evacuate from low-lying areas, and stay away from seacosts or riverbanks.

Very strong winds of more than 185kph is expected to affect a certain area in at least 12 hours.

Some houses of very light materials, like nipa and cogon, may be partially unroofed.

People are advised not to travel especially by sea or by air transportation

Impacts of wind may cause twigs and branches of small trees to be broken.

Widespread disruption of electrical power and communication services will happen.

Many large trees may be uprooted and most residential houses and buildings of mixed construction may be severely damaged.

Moderate to heavy damage may be expected, practically in agricultural and industrial sectors.

Massive damages may be expected in affected communities.

Maximum wind speed of more than 100kph is expected to affect a certain place in at least 12 to 18 hours.

There may be considerable damages to structures of light to medium construction.





Maximum wind speed is greater than 60 kph, but not more than 100kph is expected to affect a certain place in at least 24 hours.

Classes in preschool levels in all public and private schools in affected communities are automatically suspended.

Maximum wind speed of not more than 60 kph is expected to affect a certain place in at least 36 hours.

Classes in all levels are automatically suspended in affected communities.

Some coconut trees may be tilted or broken, few big trees may be uprooted.

 <p>Tropical Cyclone Warning Signal Number 1</p>	 <p>Tropical Cyclone Warning Signal Number 2</p>	 <p>Tropical Cyclone Warning Signal Number 3</p>	 <p>Tropical Cyclone Warning Signal Number 4</p>

Illustrated by: Kristal Grace C. Ila

Guide Questions:

1. What are likely to happen if Storm Signal No. 1 is raised?
2. What are likely to happen if Storm Signal No. 2 is raised?
3. What are likely to happen if Storm Signal No. 3 is raised?
4. What are likely to happen if Storm Signal No. 4 is raised?

Activity 3: “Are You Prepared?”

Directions: Fill in the table with five safety precautions each on what to do **Before**, **During**, and **After** a typhoon. Write your answer in your science notebook. An example for each is done for you.

Safety Precautions	What to do?
Before	✓ Listen to Weather forecasts. ✓ ✓ ✓ ✓
During	✓ Stay indoors. ✓ ✓ ✓ ✓
After	✓ Repair all damage in the house. ✓ ✓ ✓ ✓

Great! No one can stop you from doing your



What is It

Points to Remember:

Safety Precautions during Different Weather Conditions:

A. Sunny Day

- Wear loose-fitting, light-colored clothing made from breathable fabric.
- Drink plenty of cool liquids, especially water, before you feel thirsty to decrease your risk of dehydration.
- Wear a wide-brimmed, breathable hat or use an umbrella.
- Wear sunglasses for protection against UVA and UVB rays.
- Limit your time of exposure under the heat of the sun especially between 11:00 a.m. and 4:00 p.m.
- Use sunblock lotion.

B. Windy Day

- Get indoors if possible when high winds are occurring.
- Stay away from windows.
- If you're stuck outside in high winds, seek the safest shelter possible. This could be next to a building or in an exterior below-ground stairwell.
- During extreme high winds, the safest place in an open area may be face-down in a ditch or low-lying ground, with your hands clasped behind your head.
- If you are riding on a vehicle, advise the driver to reduce speed.





C. Rainy Day

- Keep with you an umbrella to protect you from the rain and help you move around and reach a safer place.
- Purchase a nice bright colored raincoat that is full-sized and covers you from head to toe.
- Go for separate shirt and pants pieces if needed.
- If you stay in an area of torrential rainfall, invest in gumboot. Having proper footwear is essential for you to walk through pools of water and dirty areas whenever you step outside or is returning home.
- Make sure to wash your hands properly. Get a small sanitizer which can be kept in the bag.
- Wear jacket. A nice warm jacket can prevent you from getting cold.
- Have a towel that can clean the body well, absorb all the water, as well as dry quickly to be used again.

D. Stormy Day

- Prepare for wind. Secure yard items that may blow around.
- Watch for tree limbs.
- Know your flood hazard.
- Get sandbags.
- Report localized flooding.
- During storms, keep pets indoors in a sheltered area.

Meaning of Storm Signals

Typhoon Signal	Description
<p>Signal No. 1</p> 	<ul style="list-style-type: none"> - The wind speed is 60 kph and expected to affect in a certain place in at least 36 hours. - Twigs and branches of small trees will break, some banana plants may tilt or put down, some houses of very light materials will be affected. - Classes in preschool in public and private schools will be suspended.
<p>Signal No. 2</p> 	<ul style="list-style-type: none"> - The wind speed is more than 60 kph but not more than 100kph and expected in a certain place in at least 24 hours. - Some coconut trees may tilt or break, few big trees may be uprooted, large number of <i>nipa</i> and cogon houses may be partially or totally uprooted, some galvanized roofing may be peeled off. - Damages maybe light to moderate. - Class from preschool to high school in public and private schools will be suspended.
<p>Signal No. 3</p> 	<ul style="list-style-type: none"> - The wind speed is more than 100 kph up to 185 kph and expected in a place in at least 12 to 18 hours. - <i>Nipa</i> houses will be destroyed. Considerable damages to structure of light to medium construction. - Widespread disruption of electrical power and communication services. - Moderate to heavy damage in agricultural and industrial sectors. - Sea or air transportations are cancelled. - Stay away from seacoasts or river banks. - People from low-lying areas must evacuate. - Classes in all levels are suspended.
<p>Signal No. 4</p> 	<ul style="list-style-type: none"> - The wind speed is more than 185 kph and is expected in a certain area in at least 12 hours. - May large trees are uprooted. Residential and buildings of mixed construction may be severely damaged. - Electrical power disruption and communication services are disrupted. - Massive damages are expected.

What to Do Before a Typhoon

1. Listen to weather forecasts.
2. Check and fix your house for any damage or unstable parts.
3. Store adequate supply of ready-to-eat food, clean water, and clothing.
4. Prepare flashlights, batteries, candles, and kerosene lamps.
5. Have a first-aid kit with enough medical supplies.
6. Check and clean community drainage system to prevent flood.
7. Check your electric posts to prevent accidents.
8. Know the location of evacuation centers in town.
9. Secure domesticated animals in a safe place.



Illustrated by: Kristal Grace C. Ilaog

What to Do During a Typhoon

1. Stay calm and stay indoors.
2. Keep updated with the latest weather report.
3. Cover your glass windows and appliances with cloth to avoid splinters when they break.
4. If you see signs of water rising, better turn off the sources of electricity. Electric-powered items should be stored in higher areas and refrain from using them during flood.
5. Stay away from flooded areas. Use raincoats and boots.
6. Follow the advice of local authorities.



Illustrated by: Kristal Grace C. Ilaog

What to Do After A Typhoon

1. Monitor the movement of the typhoon.
2. Watch out for live wires.
3. Repair all damages in the house.
4. Boil water.
5. Wear protective gears such as boots.
6. Clean up and dispose things that may be breeding places of mosquitoes.



Illustrated by: Kristal Grace C. Ilaog

Spectacular! You are brilliant.



What's More

Directions: Give the storm signal being described. Write your answers in your science notebook.

Activity 1: "Say My Number"

- _____ 1. The wind speed is more than 185 kph is expected in a certain area in at least 12 hours.
- _____ 2. The wind speed is more than 100 kph up to 185 kph in a place in at least 12 to 18 hours.
- _____ 3. The wind speed is 60 kph in a certain place in at least 36 hours.
- _____ 4. The wind speed is more than 60 kph but not more than 100kph in a certain place in at least 24 hours.
- _____ 5. Classes in preschool in public and private schools will be suspended.
- _____ 6. Classes in all levels are suspended.
- _____ 7. Classes from preschool, elementary to high school in public and private schools will be suspended.
- _____ 8. Electrical power disruption and communication services are disrupted.

Activity 2: "What Should We Do?"

Directions: Identify if the following safety precautions being described refers to preparations to be done **before**, **during**, or **after** a typhoon. Write your answers in your science notebook.

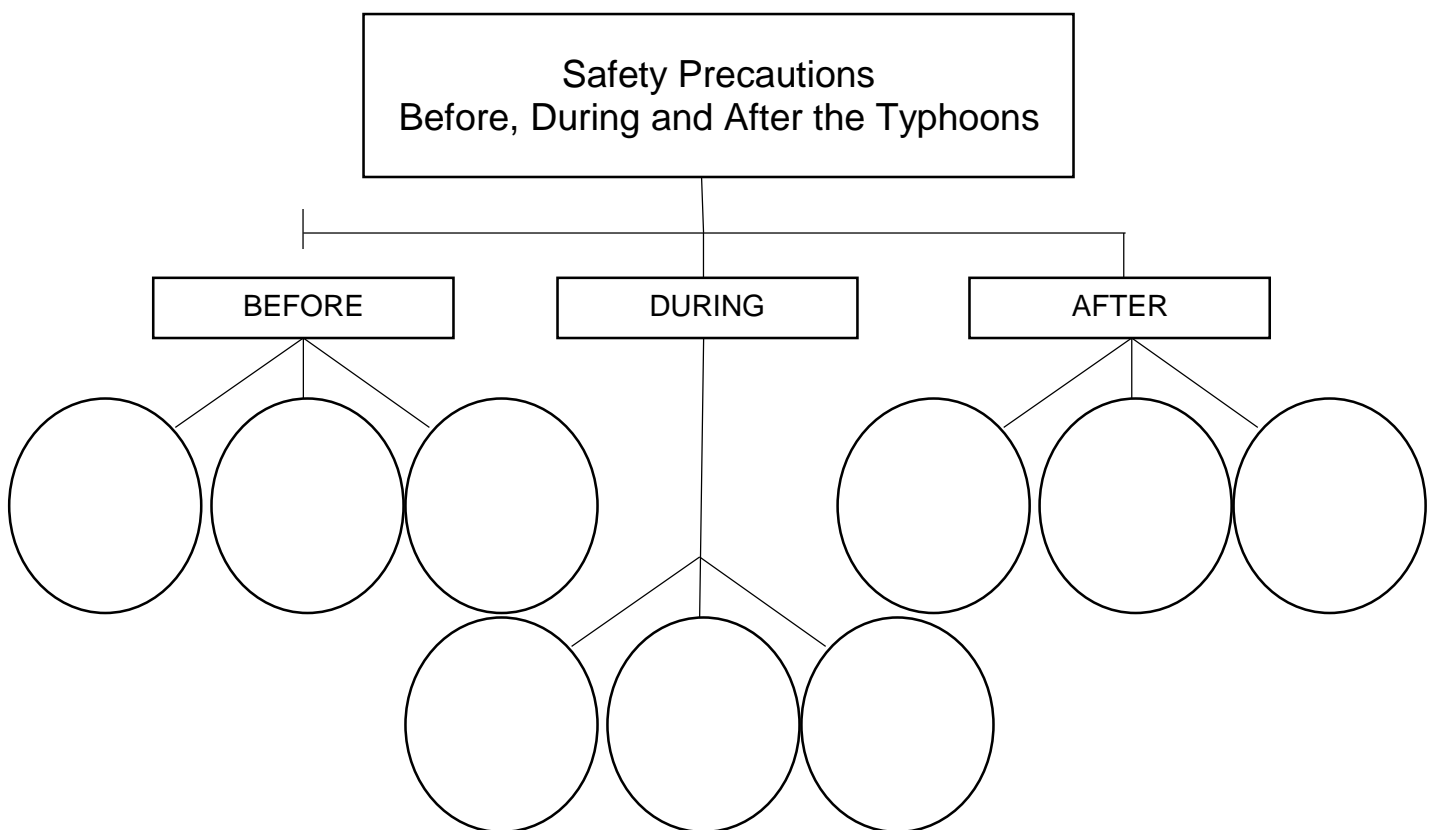
- _____ 1. Listen to weather forecasts. Tune in to radio set and television or read the newspaper.
- _____ 2. Cover your glass windows and appliances with cloth to avoid splinters when they break.
- _____ 3. If you see signs of water rising, better turn off the main sources of electricity.
- _____ 4. Store adequate supply of ready-to-eat food, clean water and clothing.
- _____ 5. Repair all damages in the house.

Great! You are doing a good

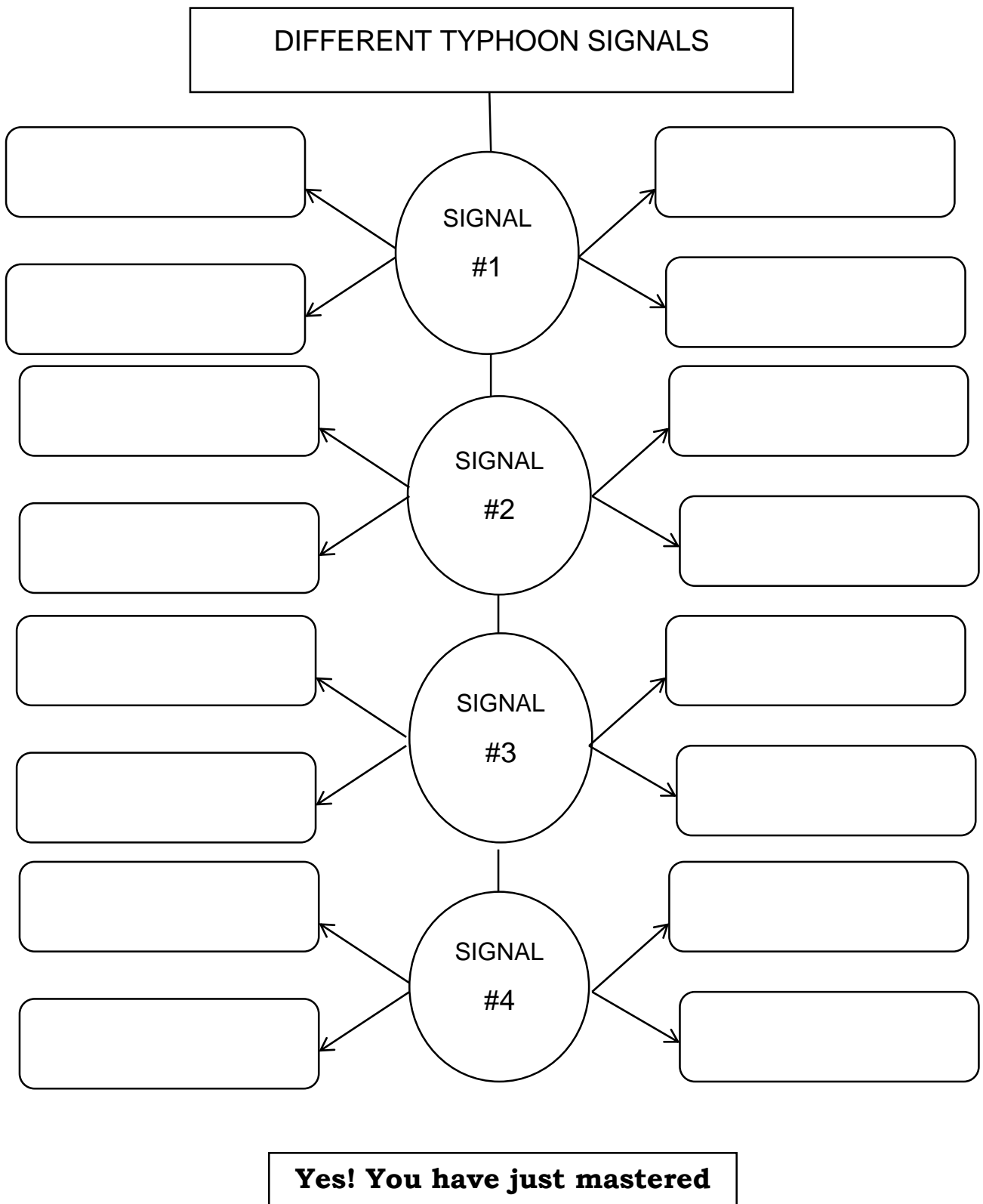


What I Have Learned

A. Directions: Complete the Graphic Organizer below by writing the safety precautions to be done before, during and after the typhoons. Do it in your science notebook.



B. Directions: Complete the Graphic Organizer below to describe each typhoon signal. Do it in your science notebook.





What I Can Do

Directions: Read and understand the situation below. Write your answer in your science notebook.

Draw a situation **during typhoon storm signal no.3** and state some safety precautions to be done during the storm.

Wonderful! You are creative. Keep



Assessment

A. Directions: Read and understand each question. Write the letter of the most appropriate answer in your science notebook.

- _____ 1. You see dark clouds in the sky and you are going to school. Which of the following should you do?
- a. Bring extra clothes.
 - b. Bring an umbrella or raincoat.
 - c. Wait for the rain to fall.
 - d. Be absent from the class.
- _____ 2. It is windy and rainy days. What should you do?
- a. Wear new clothes.
 - b. Wear thin clothes.
 - c. Use sandals or slippers.
 - d. Bring umbrella or raincoat.
- _____ 3. Your father is a farmer. When must he decide to plant rice?
- | | |
|-------------------|-----------------------------------|
| a. on any month | c. on a sunny day |
| b. on a rainy-day | d. on either a sunny or rainy day |

- _____ 4. What does the daily weather forecast tell you?
- place
 - temperature
 - kind of weather
 - all of the above
- _____ 5. Which one describes stormy weather?
- Birds are flying.
 - Smoke goes straight up.
 - Farmers are busy planting.
 - There are heavy rains and strong winds.
- _____ 6. Which of these situations show Typhoon Signal No. 2?
- Classes in all levels are not suspended.
 - Classes in all levels are automatically suspended in affected communities.
 - Classes in preschool levels in all public and private schools in affected communities are automatically suspended.
 - Classes in preschool, elementary and high school levels in all public and private schools in the affected areas are automatically suspended.
- _____ 7. Typhoon Signal No. 1 is raised over the place where you live. Classes are not suspended. However, the place where you live gets flooded easily when it rains. Would you go to school? Why or why not?
- I will go to school and bring umbrella instead.
 - I will not go to school but just play in the rain.
 - I will still go to school because my teacher might be angry.
 - I will not go to school because I might be caught in the flood.
- _____ 8. Mang Jose prepared his fishing net. He observed that the sky is overcast. What is the best thing that he should do?
- Hurry and go on fishing.
 - Keep the nets and do not go fishing.
 - Call other fishermen to go on fishing.
 - Stay outside and look for the coming of typhoon.
- _____ 9. The air temperature drops to 18°C. What should you wear?
- old clothes
 - thin clothes
 - new clothes
 - thick clothes

- _____ 10. You are sweeping the dried leaves in the backyard. You have noticed that the wind is blowing hard. Will you burn the dried leaves? Why or why not?
- I will throw the leaves into the river.
 - I will burn the dried leaves so that the backyard will be clean.
 - I will not burn the dried leaves because it may cause a big fire.
 - None of these.

B. Directions: Write **true** if the statement is correct and **false** if it is not. Write your answers in your science notebook.

- _____ 1. The weather affects the activities of people.
- _____ 2. It is always wise to tune in to radio or TV for weather updates.
- _____ 3. Meteorologists rely only on information about cloud formation and wind direction to forecast the day's weather.
- _____ 4. One has to store canned food and drinking water during the typhoon.
- _____ 5. Knowledge about the day's weather helps us decide on a planned activity.

Spectacular! You are great.



Additional Activities

Directions: Make a poster showing safety precautions during different weather conditions. (stormy days, sunny days, rainy days and windy days.) Do it in your science notebook.

Congratulations! Next module is now waiting for



Answer Key

working under the sun.
 2. Most wide rimmmed hats when
 finished usually dry.
 4. Use newspapers whenever you do out
 3. Do not wash in dry water
 season.
 5. Stay inside the house during rainy
 skin from intense heat of the sun.
 1. Apply sunblock lotion to protect your

Activity 1 "How Can You Be Safe?"



What's New

- 2. fine
- 4. fine
- 3. safe
- 5. fine
- 1. fine



What's In

- 2. Yes
- 4. Yes
- 3. No
- 5. Yes
- 1. Yes
- C.

- 4. Signa | No. 4
- 3. Signa | No. 3
- 5. Signa | No. 5
- 1. Signa | No. 1
- B.

2.	😊
4.	😊
3.	😞
5.	😊
1.	😊

A.



What I Know

businesses in all public and private schools are communication-related.
 1. Things and resources of small trees may be broken and only classes in
 Guide Questions:

<p>businesses</p> <p>communication-related</p> <p>businesses in all public and private schools are communication-related.</p> <p>Things and resources of small trees may be broken and only classes in</p> <p>Guide Questions:</p>	<p>businesses</p> <p>communication-related</p> <p>businesses in all public and private schools are communication-related.</p> <p>Things and resources of small trees may be broken and only classes in</p> <p>Guide Questions:</p>	<p>businesses</p> <p>communication-related</p> <p>businesses in all public and private schools are communication-related.</p> <p>Things and resources of small trees may be broken and only classes in</p> <p>Guide Questions:</p>	<p>businesses</p> <p>communication-related</p> <p>businesses in all public and private schools are communication-related.</p> <p>Things and resources of small trees may be broken and only classes in</p> <p>Guide Questions:</p>
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Activity 2 "Do You Know Me?"

5. Answers may vary
 1. Answers may vary
 Guide Questions:

2. Some coconut trees may be tilted or broken, few big trees may be uprooted. Some houses of very light materials, like nipa and cogon, may be partially unroofed. Classes in preschool, elementary and high school levels in all public and private schools in affected areas are suspended.

3. There may be considerable damages to structures of light to medium construction. Widespread disruption of electrical power and communication services will happen. People should seek shelter in strong buildings, evacuate from low-lying areas, and stay away from seacoasts or riverbanks. Moderate to heavy damage may be expected, practically in agricultural and industrial sectors. People are advised not to travel especially by sea or by air transportation. Classes in all levels are automatically suspended in affected communities.

4. Many large trees may be uprooted and most residential houses and buildings of mixed construction may be severely damaged. Electrical power and communication services are disrupted. Massive damages may be expected in affected communities.

Activity 3 "Are You Prepared?"

Safety precautions	What to do?
Before	<ul style="list-style-type: none"> ✓ Listen to Weather forecasts. ✓ Check and fix your house for any damage or unstable parts. ✓ Store adequate supply of ready-to-eat food, clean water, and clothing. ✓ Prepare flashlights, batteries, candles, and kerosene lamps. ✓ Have a first-aid kit with enough medical supplies. ✓ Secure domesticated animals in a safe place.
During	<ul style="list-style-type: none"> ✓ Stay indoors ✓ Keep calm. ✓ Keep updated with the latest weather report. ✓ Cover your glass windows and appliances with cloth to avoid splinters when they break. ✓ If you see signs of water rising, better turn off the sources of electricity. ✓ Stay away from flooded areas. ✓ Use raincoats and boots.
After	<ul style="list-style-type: none"> ✓ Repair all damage in the house. ✓ Watch out for live wires. ✓ Monitor the movement of the typhoon. ✓ Boil water. ✓ Wear protective gears such as boots. ✓ Clean up and dispose things that may be breeding places of mosquitoes.



What's More

- A. "Say My Number"**
1. Signal no. 3
 2. Signal no. 1
 3. Signal no. 4
 4. Signal no. 1
- B. "What Should We Do?"**
1. after
 2. after
 3. before
 4. during
 5. during
5. Signal no. 3
 6. Signal no. 4
 7. Signal no. 2
 8. Signal no. 2



What I Have Learned

A. Answers may vary.
B. Answer may vary.



What I Can Do

Answers may vary.



Assessment

- A.**
1. a
 2. d
 3. b
 4. a
 5. d
- B.**
1. True
 2. True
 3. False
 4. True
 5. True
6. c
 7. a
 8. a
 9. d
 10. d



Additional Activities

Answers may vary.

Reference

Abutay, L., Bonao, D., Crucis, E., Eslabra, J., Gramaje, E., Guadamor, M., Hernandez, A., Ilagan, L., Lamera, F., Manawatao, R., Panganiban, H., Rojo, J., Tosco, R. R., & Zape J. (2015). *Science grade 4: Teacher's guide* (1st ed., pp. 327-334). Department of Education.

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