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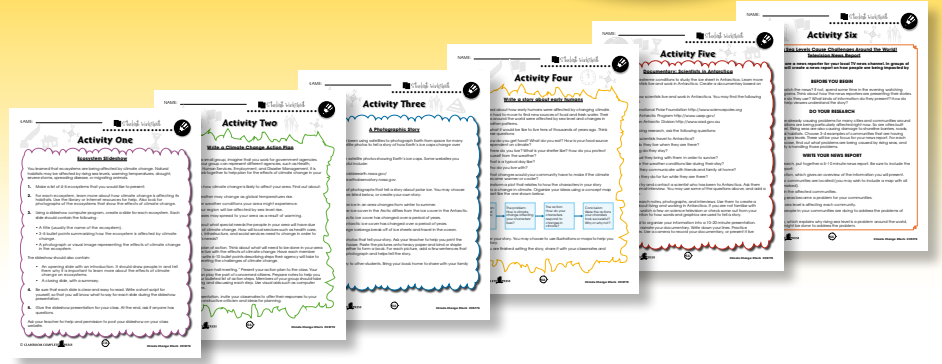
EASY MARKING™ ANSWER KEY 19

MINI POSTERS 21

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Sea Level Changes

1. Have you ever been to the ocean? Do you live in a city near the sea? Imagine if the water level in the ocean rose by a few feet. What would happen to cities and towns near the sea?

2. Match each word to its definition. You may use a dictionary to help you.

<p>1 expand</p> <p>2 climate</p> <p>3 predict</p> <p>4 sea level</p> <p>5 century</p> <p>6 flood</p>	<p>To estimate a future condition based on past conditions and the knowledge of how things change.</p> <p>To grow larger and take up more space.</p> <p>When water fills an area that is usually dry.</p> <p>A period of one hundred years.</p> <p>The average weather conditions in an area over many years.</p> <p>The place where land meets ocean water.</p>	<p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>E</p> <p>F</p>
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Sea Level Changes

Changes in Earth's climate causes changes in sea level. When the climate becomes warmer, sea level rises. The rise in sea level has two causes.

When water heats up, it **expands**. In other words, warmer water takes up more space than cooler water. The difference is small. You wouldn't notice the water in a glass taking up more space as it warms. However, the amount of water in the oceans is so great. Even a small change in temperature can expand the surface water enough to cause a significant rise in sea levels.



Sea retaining wall — Sydney, AU

Sea levels also rise due to the addition of water and ice into the oceans. As polar ice caps melt, huge blocks of ice move from the land into the sea at the poles. Water from the melting ice also adds to ocean water.

STOP

What happens to the sea level when Earth's climate becomes warmer?

Scientists predict that sea levels may rise as much as 26 inches by the end of this century. That may not sound like much. But it will have horrible effects for people living close to sea level. Many large cities are built at the ocean's edge. Rising seas could flood areas where millions of people live. Some island nations are at risk of completely disappearing under the sea. Sea level rise could be even greater if ice sheets melt at a faster rate.



Sea Level Changes

1. Fill in each blank with the correct word from the reading. You may use the same term more than once.

- When water heats up, it _____ in size.
- Water from melting _____ adds to the volume of the oceans. It can cause a rise in sea level.
- Scientists predict that sea levels may rise as much as _____ by the end of this century.
- Sea level rise could be even greater if ice sheets melt at a _____ rate.

2. On the map below, circle the cities that will most likely be affected by a rise in sea level.



Sea Level Changes

3. Answer each question with a complete sentence.

- Describe **two** ways in which global climate change can cause a rise in sea level.

- Explain why a rise in sea level of several inches could have horrific effects for millions of people around the world.

Research

4. How is rising sea level affecting your country?

Find a map on the Internet. Find your country. What cities in your country are close to the ocean?

Research more about how coastal areas in your country are affected by rising sea level. Pick a city, town or region in your country to research. Find out:

- If rising sea level has already affected your area.
- What effects your area will most likely experience if sea level continues to rise.
- What people in your area are doing to help guard against the effects of rising sea level.

Write a report to share with the rest of your class.



Create an ecosystem globe.

You will need:

- A globe showing the continents and oceans.
- Scrap newsprint paper.
- Art paste.
- Paint brushes.
- Round balloons.
- Plastic table cover.

Create a paper mache globe. Cover your work space with a plastic table cover. Tear the newsprint paper into strips about 1 inch by 4 inches. Water down your paste slightly so that it can be easily painted onto the paper. Blow up your balloon. Paste both sides of a paper strip and lay it flat onto the balloon. Keep repeating until the balloon has an even layer of paper covering it. Let this layer dry completely. Repeat the entire procedure to add 2 more layers, or until a thick shell has formed around your balloon.

Wait until your paper mache globe is completely formed and dry. Use a pencil to outline a sketch of the continents and oceans. Use a geographic globe as a model.

Now, sketch in the names and locations of the major ecosystems found around the globe. Use the library or Internet resources to help you. Include both land and ocean ecosystems.

Decide what color will represent each type of ecosystem on your globe. Begin by outlining the continents in black paint. Then, choose another dark color to outline the ecosystem locations. Wait until the outline paint is dry. Fill in the areas with the colors you chose for each ecosystem. Now wait for this paint is dry. You may go back and label the larger ecosystems with a permanent marker. Create a key showing which color represents which ecosystem. Display your globe in your classroom.



Word Search

Find all of the words in the Word Search. Words are written horizontally, vertically, diagonally, and some are even written backwards.

- | | | | |
|----------|-----------|-------------|-------------|
| bacteria | economy | grassland | sea level |
| cape cod | ecosystem | hurricanes | storms |
| cities | feedback | ice | temperature |
| climate | flood | long island | tundra |
| deposit | forest | malaria | virus |
| desert | fungi | melt | weather |
| disease | gas | mosquito | |
| drought | glaciers | permafrost | |



Comprehension Quiz

Part C

Answer the questions in complete sentences.

- Describe the difference between **weather** and **climate**. 2

- Describe **two** tools scientists use to study melting ice sheets. 4

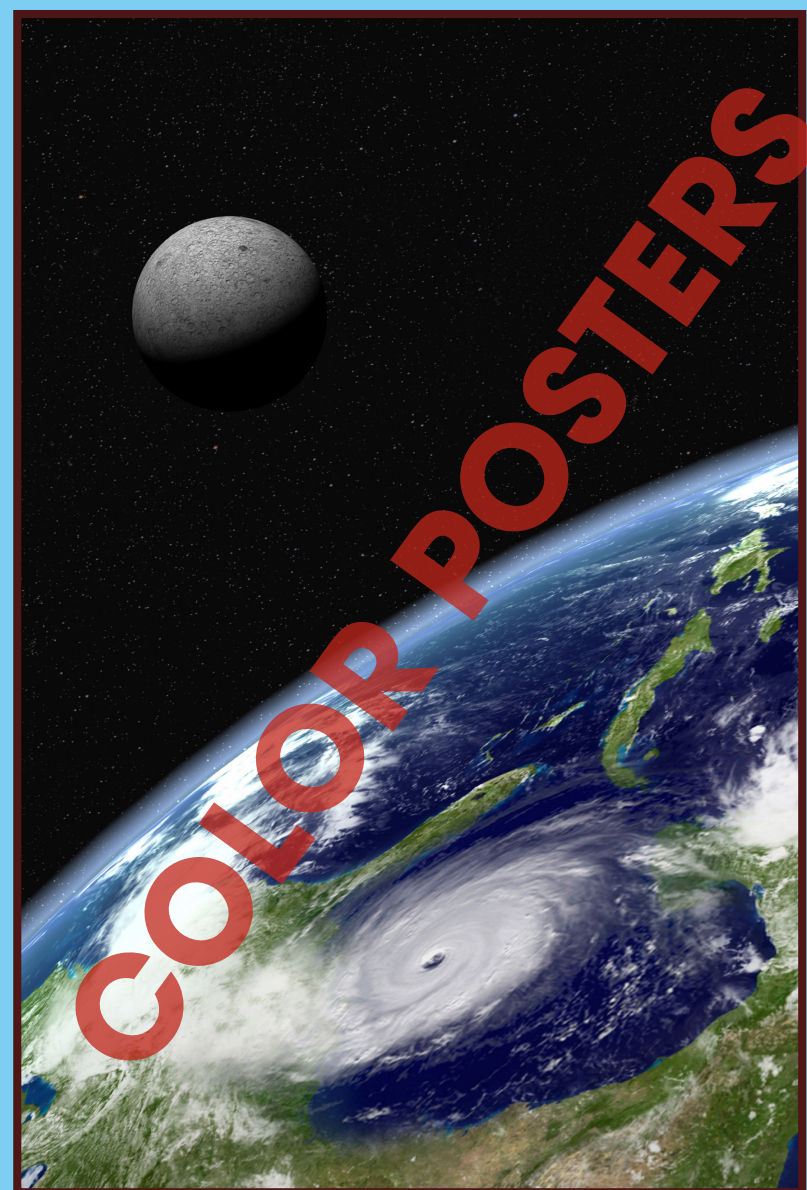
- Explain why small changes in sea level can have a big effect on people. 2

- Explain how climate change could cause the spread of diseases. 3

- Describe how the economies of countries could be affected by climate change. 3

SUBTOTAL: /14

Extreme Weather



"Satellite image of a Hurricane located in the Gulf of Mexico"

NAME: _____

Before You Read



Sea Level Changes



1. Have you ever been to the ocean? Do you live in a city near the sea? Imagine if the water level in the ocean rose by a few feet. What would happen to cities and towns near the sea?

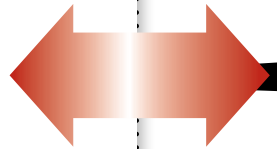
2. Match each word to its definition. You may use a dictionary to help you.

- 1 expand
- 2 climate
- 3 predict
- 4 sea level
- 5 century
- 6 flood

- A To estimate a future condition based on past conditions and the knowledge of how things change.
- B To grow larger and take up more space.
- C When water fills an area that is usually dry.
- D A period of one hundred years.
- E The average weather conditions in an area over many years.
- F The place where land meets ocean water.

- A
- B
- C
- D
- E
- F

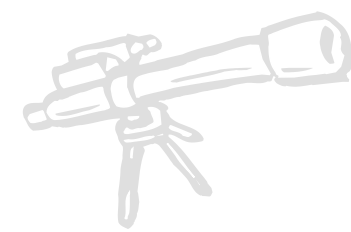
- 1 B
- 2 E
- 3 A
- 4 F
- 5 D
- 6 C
- 7



EASY MARKING ANSWER KEY



1.
Answers will vary.



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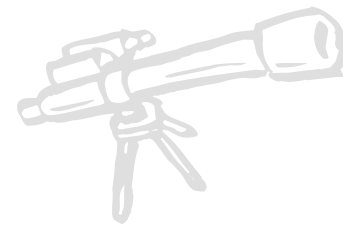
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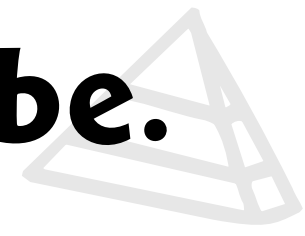


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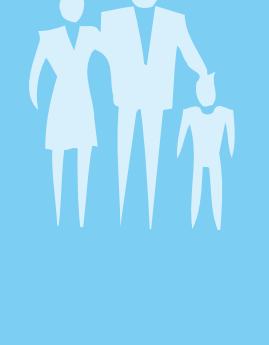


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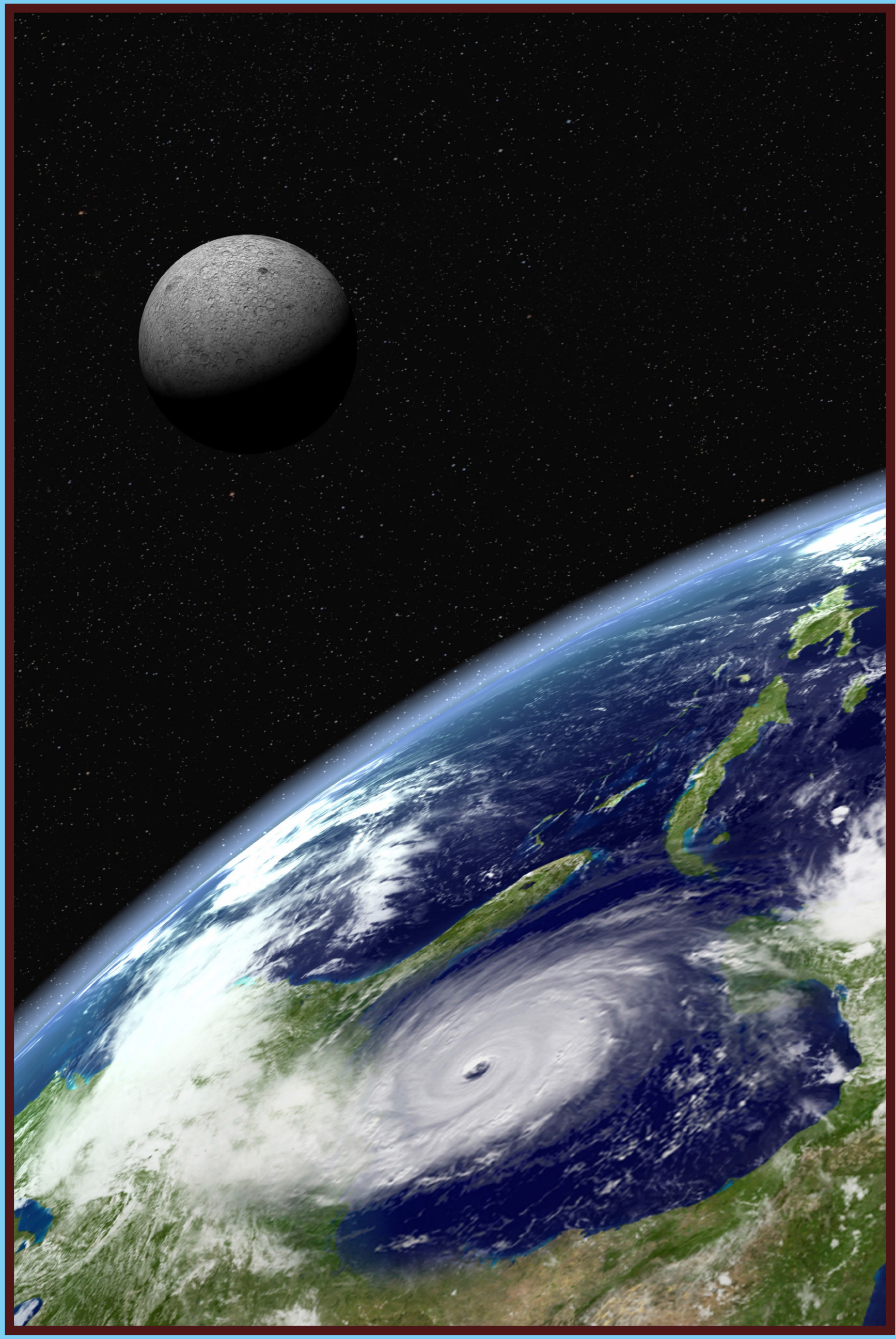
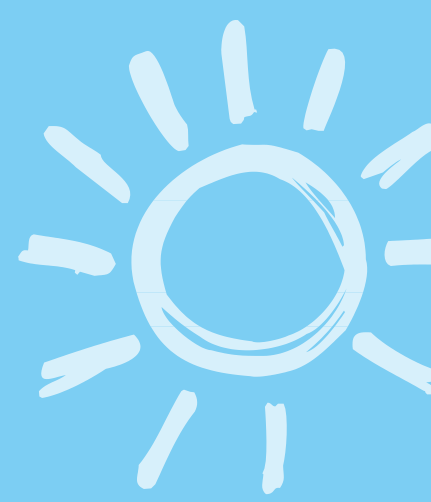
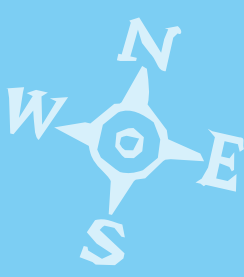
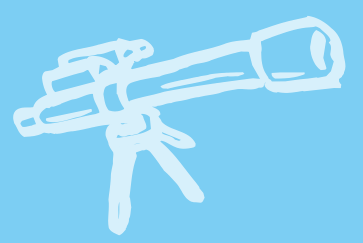
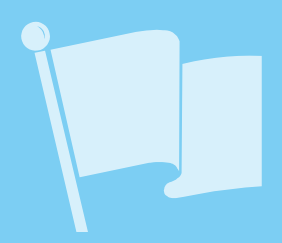
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