

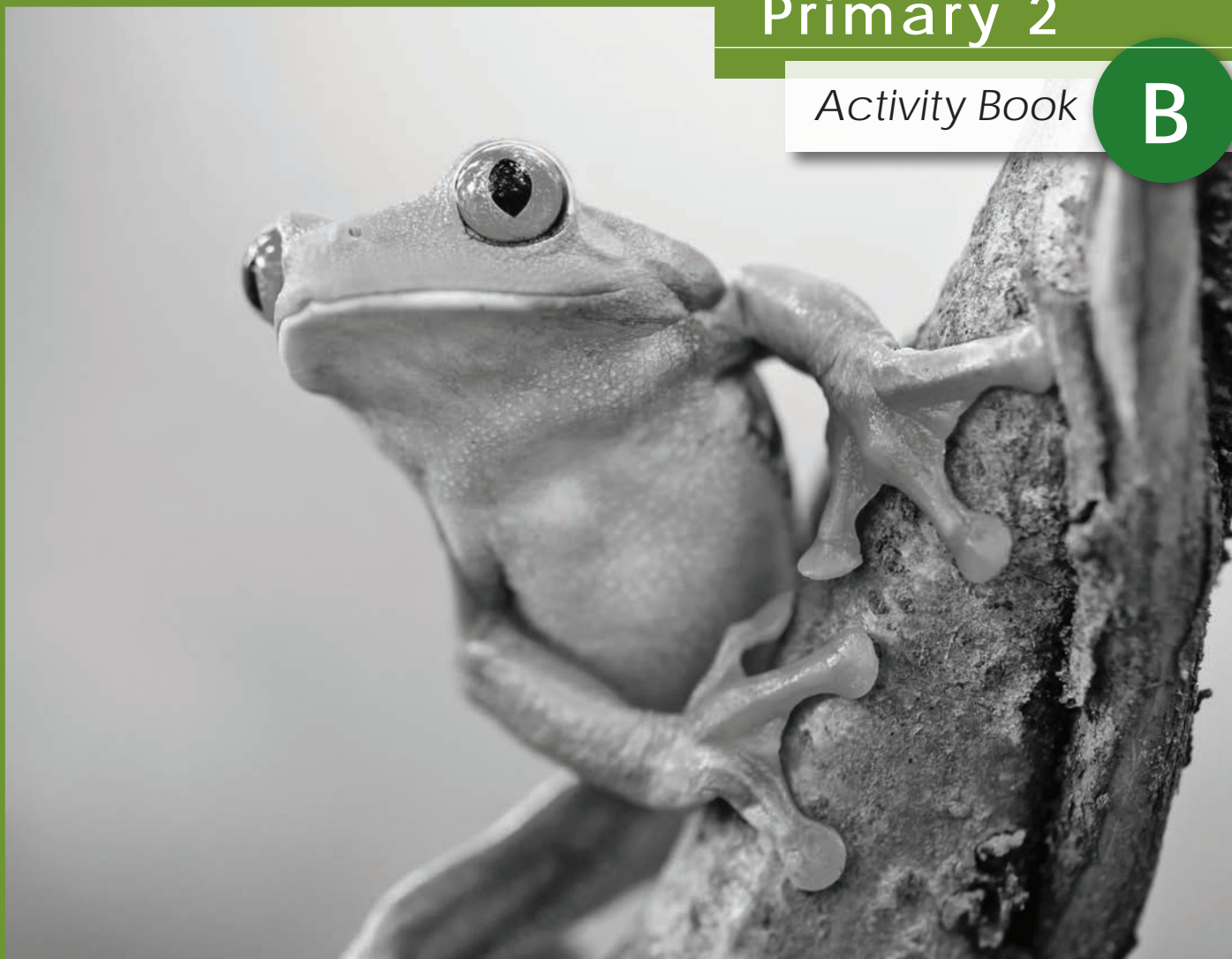


# Let's Do SCIENCE

Primary 2

Activity Book

**B**



# Let's Do Science

Let's Do Science is based on the United States Next Generation Science Standards (NGSS). The series consists of full-color textbooks and full-color activity books for Grades K to 6.

Let's Do Science engages students with a highly visual presentation of the disciplinary core ideas in the textbooks and places an emphasis on applying scientific knowledge using NGSS practices through numerous scientific investigations. Let's Do Science sees engineering as an essential element of science education and as such is tightly integrated into both the textbooks and activity books.

The Let's Do Science activity books include the follow features:

## AB Activity

Activities and investigations related to concepts and topics covered in the Let's Do Science Textbook.

## Engineer It!

Goes beyond inquiry by encouraging students to design, model and build to engineer solutions to defined problems.

## Review

Topical questions at the end of each chapter for formative assessment.





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Activity 5.1



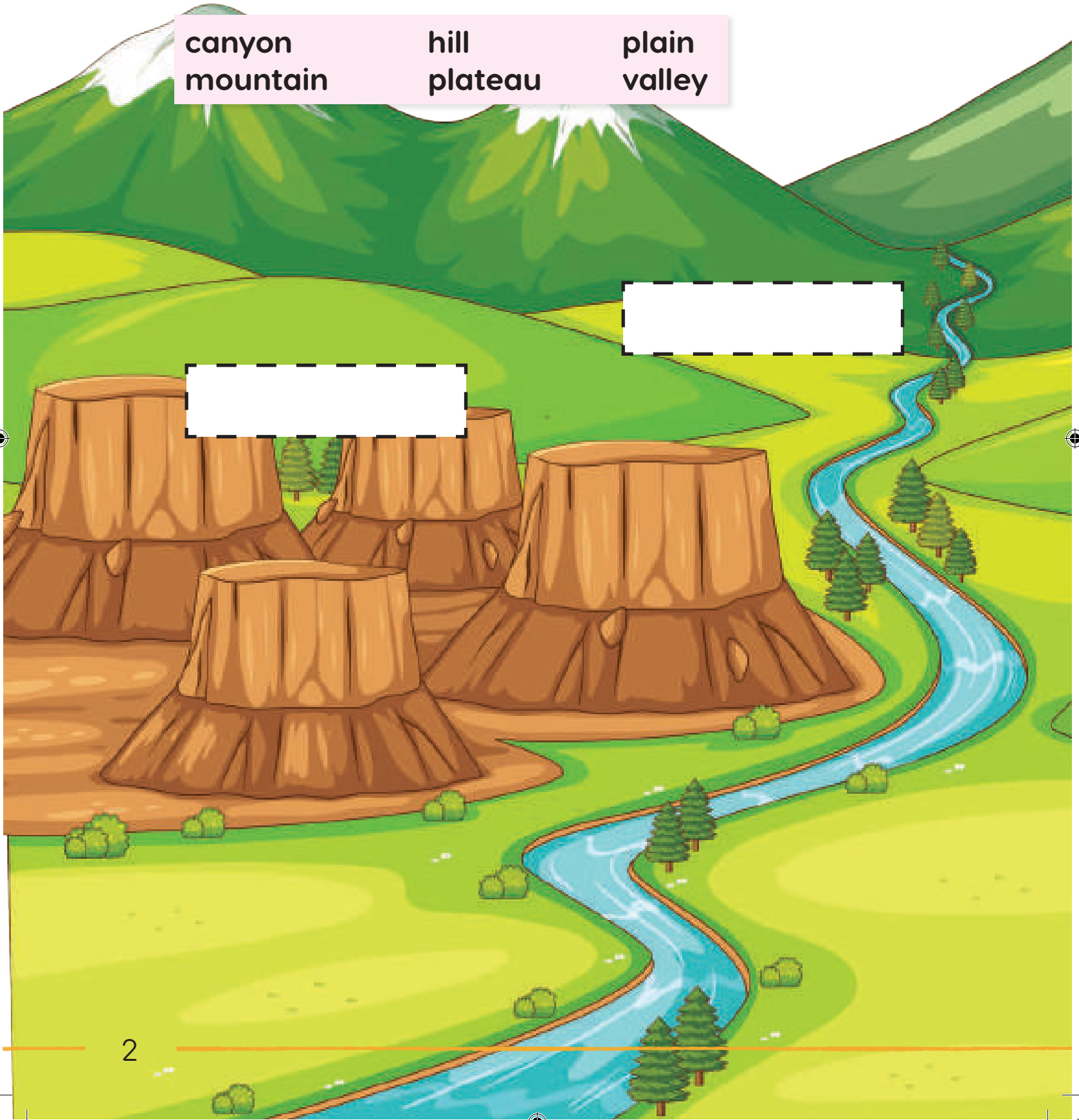
# Earth's Landforms

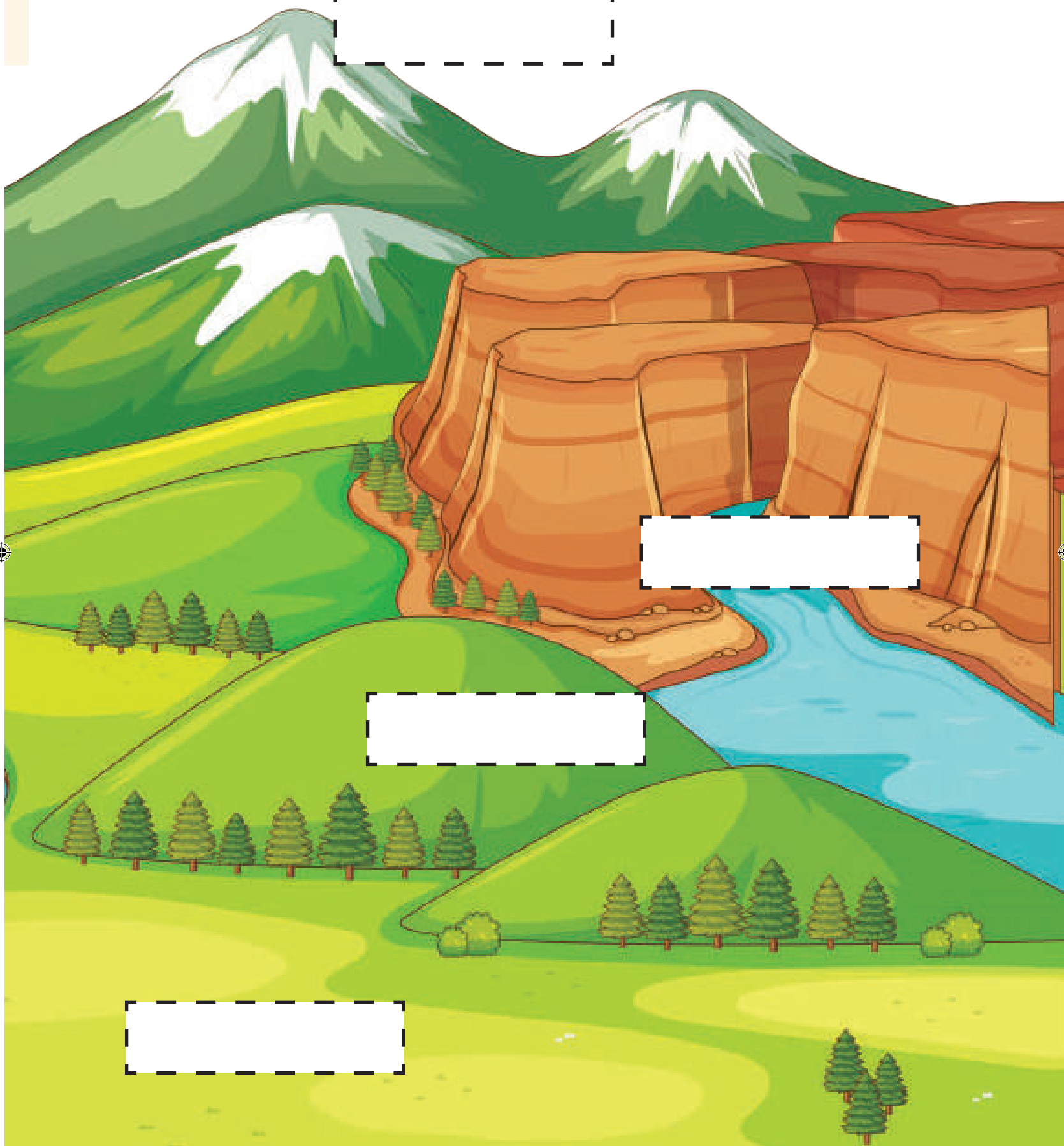
1. Use the words in the box to label the landforms.

canyon  
mountain

hill  
plateau

plain  
valley







2. Name and describe the landforms.

(a)



Name of landform:

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Description:

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(b)



Name of landform:

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Description:

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(c)



Name of landform:

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Description:

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(d)



Name of landform:

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Description:

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(e)



Name of landform:

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Description:

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(f)



Name of landform:

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Description:

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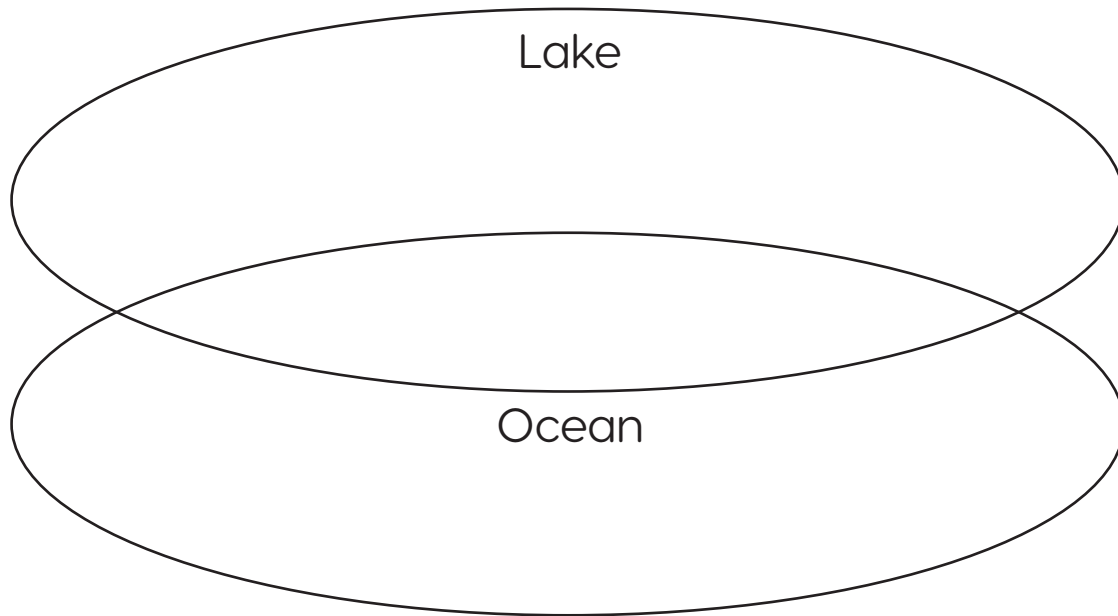
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## Activity 5.4

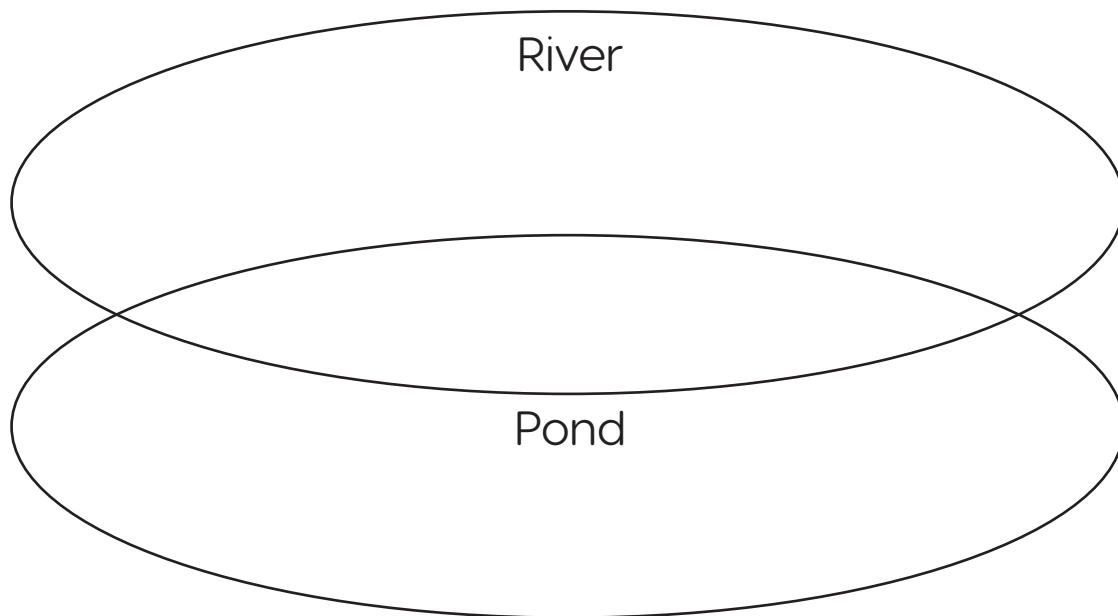


### Comparing Bodies of Water

1. Use the Venn diagram to compare a lake and an ocean.



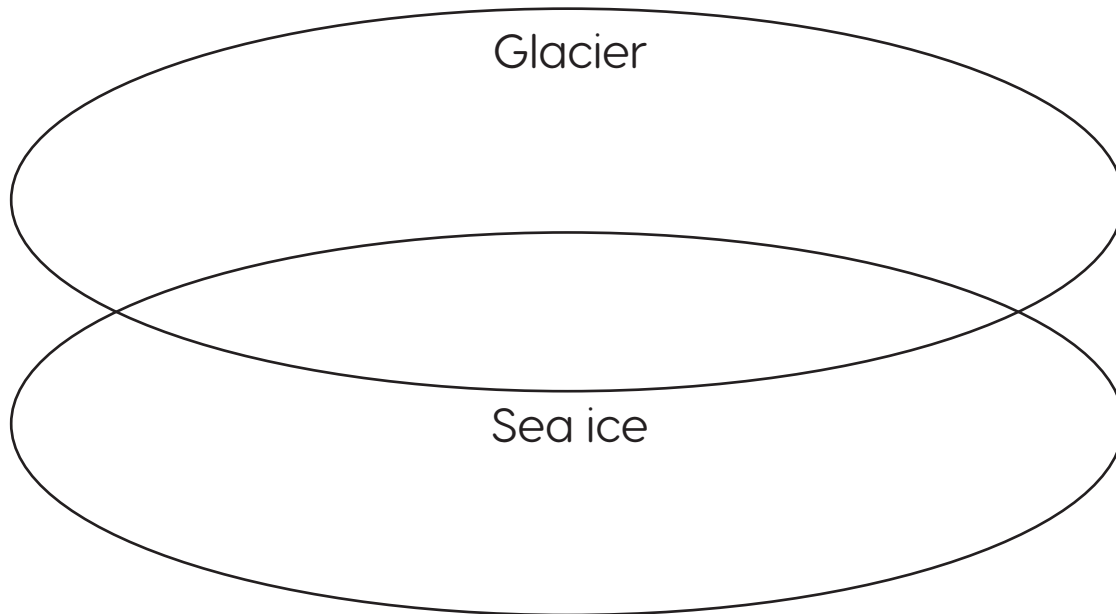
2. Use the Venn diagram to compare a river and a pond.



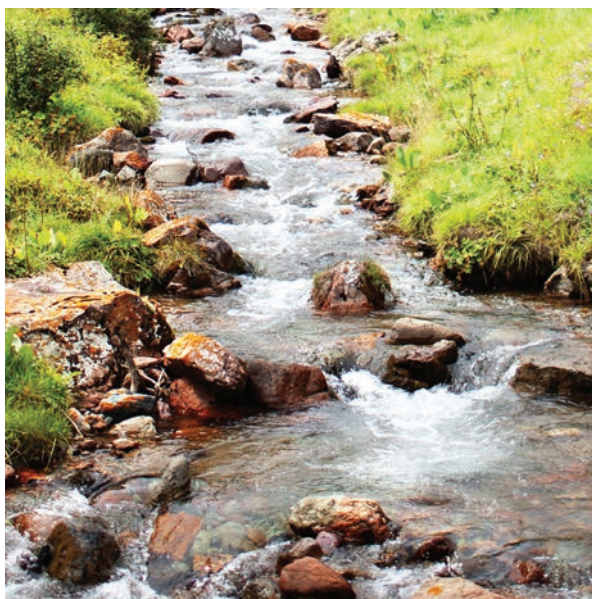




3. Use the Venn diagram to compare a glacier and sea ice.



4. Explain how the water in the stream changes throughout the year.



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## Activity 5.5



### Mapping an Island

Draw a map of the island.  
Complete the key to show what is on the map.



**Key:**



water



sand



trees



## Review



## Review

1. How is a mountain different from a hill?

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2. How is a plateau different from a plain?

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3. List four types of bodies of water.

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4. How is a lake different from the ocean?

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5. List two examples of where water on Earth exists in solid form.

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6. Provide two examples of where maps are used.

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7. Describe how maps are useful to people.

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8. (a) What does the map show?



(b) List four things shown on the map.

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## Activity 8.1



### Changing Solid Matter

1. Take a sheet of paper and change it in two different ways. Draw a picture and describe how you changed it.

Change 1:

Describe how you changed the paper.

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Change 2:

Describe how you changed the paper.

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2. Find two objects in your classroom and change them to make something new. Draw a picture and describe how you changed each object.

Object 1:

Describe how you changed the object.

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Object 2:

Describe how you changed the object.

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## Activity 8.2



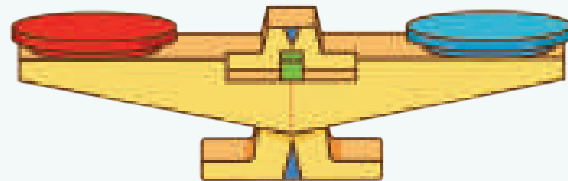
# How Does Solid Matter Change?

## Materials

- modeling clay



- balance



## Procedure

1. Use the balance to make two balls of modeling clay that have the same mass.
2. Change one of the balls into a new shape. Describe how you changed it.
3. Use the balance to check the mass of the clay. What do you notice?





## Draw a Model

Draw a model to show how you changed the clay.



## Observations

Describe what you observed at Step 3.

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## Analyze and Interpret

Blake cuts a loaf of bread into slices. What can you infer about the mass of the loaf of bread?

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## Activity 8.3



# Taking Apart and Putting Together

## Materials

- building blocks or multi-link cubes



1. Put some blocks together to build an object. Name and draw what you made.

Object: \_\_\_\_\_



2. Pull apart the object. Put the blocks together to make something new. Name and draw what you made.

Object: \_\_\_\_\_

3. Pull apart the object. Put the blocks together again to make an animal. Name and draw the animal.

Animal: \_\_\_\_\_

## Activity 8.4



# Properties and Temperature

## Materials

- crayons



- chocolate mold



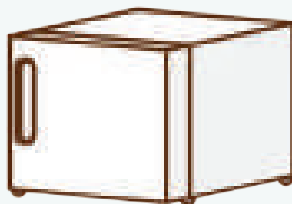
- heat source



- pan



- freezer



- jars



## Procedure

1. Remove the paper from the crayons. Describe the properties of the crayons.



2. Break the crayons into small pieces and place them into the jars. Keep the colors separate.



3. Put the jars in the pan and add some water. Place the pan on the heat source. Observe what happens to the crayons.





4. Pour the melted crayons into the chocolate mold and place the mold in the freezer.

5. Once frozen, remove the crayons from the mold and observe their properties again.



## Observations

1. Record your observations in the table.

Crayon Properties	
Before Heating	
After Heating	
After Cooling	





2. Draw a labeled diagram with arrows to show how the state of matter changed when the crayons were heated and cooled.



## Analyze and Interpret

Do you think the crayons were still crayons once they cooled? Explain your answer.

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## Activity 8.5



# Reversible and Irreversible Change

Plan and conduct an investigation to show that some changes to matter caused by heating or cooling can be reversed and some cannot.



## Suggested Materials

- butter



- chocolate



- raw egg



- ice



- bread



- milk



- beakers



- heat source



- freezer





# Procedure

Write the steps you will take.

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## Observations

1. Describe the changes you observed when the matter was heated.



2. Describe the changes you observed when the matter was cooled.





## Analyze and Interpret

1. List the changes you observed. Label each change as reversible or irreversible.

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2. Chelsea has a block of chocolate and a candy mold in the shape of a shell. Explain how she can make chocolates in the shape of a shell.

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## Activity 8.6

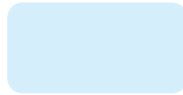
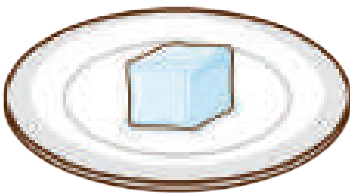


### Identifying Changes

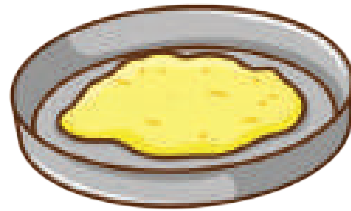
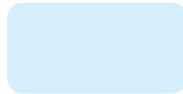
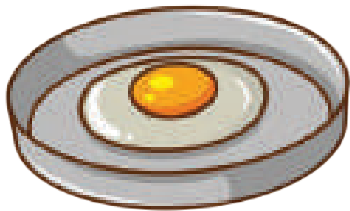
Draw  if the change is irreversible.

Draw  if the change is reversible.

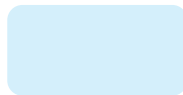
(a)



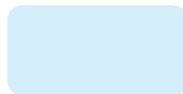
(b)



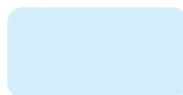
(c)



(d)



(e)

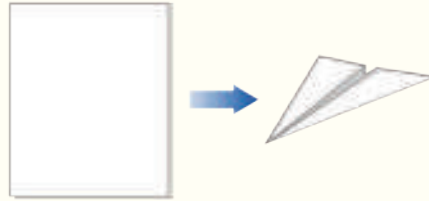


Review



Review

1. Ethan made a sheet of paper into a paper airplane. True (✓✍) or false (✗✍).



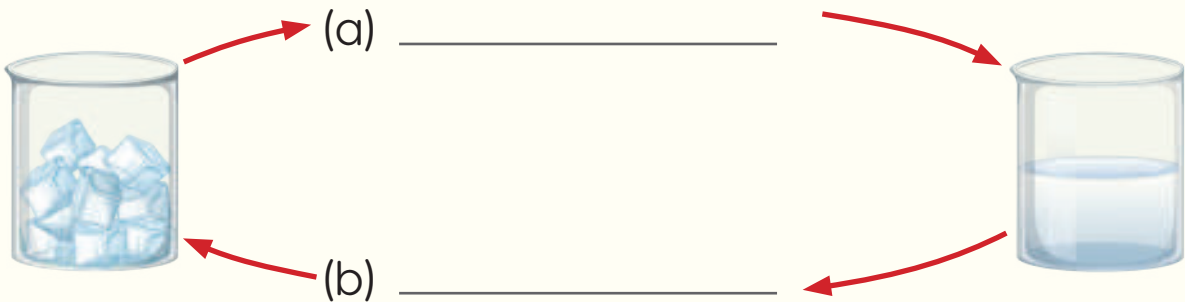
(a) The shape of the matter changed.

(b) The mass of the matter changed.

2. Use the words in the box to fill in the blanks.

freezing

melting



3. Halle heated a raw egg in a pan. Can she change it back into a raw egg? Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_

