

# MAJOR SCIENCE



## TEACHER'S GUIDE





## CONTENTS

Contents	2
Tour of a unit	3
Unit 1	5
Unit 2	9
Unit 3	13
Review 1	15
Unit 4	19
Unit 5	23
Unit 6	27
Review 2	29
Unit 7	33
Unit 8	37
Unit 9	41
Review 3	43
Unit 10	47
Unit 11	51
Unit 12	55
Review 4	57



## TOUR OF A UNIT

### LESSON 1

#### WE LEARN

The first part of “We Learn” teaches and practices the new vocabulary of the Unit. It also provides pictures to demonstrate the new knowledge in science.

This provides the new vocabulary for the unit. The teacher can reinforce it with flashcards. Demonstration pictures of the new vocabulary help students to visualize and remember new words easily.


**UNIT 1**

**WATER**

**LESSON 1**


**WE LEARN**

1. Listen, point and repeat. 01




water

liquid



water vapor

gas



ice

solid

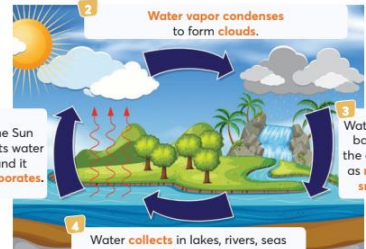
2. Listen and read. 02

There are three **states** of water: **liquid**, **gas** and **solid**.

- Water is a liquid at room temperature.
- When we **boil** water, it turns into a gas (water vapor).
- When we **freeze** water, it turns into a solid (ice).

3. What is the water cycle? Listen and read. 03

The water cycle shows how water moves around between the air and land. There are four stages in the water cycle.



5


#### WE PRACTICE

In this part, there are exercises in different English skills (Listening, Speaking, Reading, Writing) to practice the new knowledge in We Learn.


Exercises are given to practice the new knowledge.

**WE PRACTICE**


4. Look and match. Then say.




a



b



c



d

water in a river

Popsicle

snowman

water vapor from hot springs

gas

liquid

solid

A Popsicle is a solid.

5. Complete the sentences using the words from the box.

solid

liquid

three

boil

freeze

- Water has \_\_\_\_\_ different states.
- These states are liquid, gas and \_\_\_\_\_.
- We can find water in \_\_\_\_\_ form at room temperature.
- Water turns into water vapor when we \_\_\_\_\_ it.
- When we \_\_\_\_\_ water, it turns into ice.

6. Choose the correct answer.

- The Sun heats water and it \_\_\_\_\_.  
A. condenses      B. falls      C. evaporates
- Water vapor \_\_\_\_\_ to form clouds.  
A. condenses      B. boils      C. falls
- Water \_\_\_\_\_ back to the ground as rain or snow.  
A. falls      B. heats      C. collects
- Water \_\_\_\_\_ in lakes, rivers, seas and oceans.  
A. freezes      B. collects      C. condenses

6

## LESSON 2

### WE PRACTICE & WE DO

There is a small activity and a project or activity as the work needed to create an outcome. The students can do it individually or in groups.

Exercises in different English skills to practice new knowledge

Students do small projects and make their own products. It helps the lesson be more relatable and interesting.

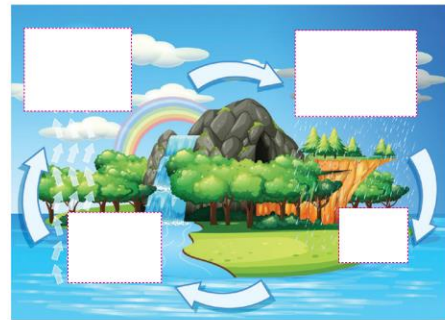
#### 7. Listen and complete the text. 🎧 04

Water can exist in three different states: liquid, gas and solid. Water is a (a) \_\_\_\_\_ at room temperature. In the gas state, water is called (b) \_\_\_\_\_ or steam. In the solid state, water is in the form of ice or (c) \_\_\_\_\_. Water can change from one state to another when its temperature changes.

Let's see how water changes (d) \_\_\_\_\_ in the water cycle. Water changes to water vapor when the Sun heats it. Then water vapor condenses and forms (e) \_\_\_\_\_. Water falls from the clouds as (f) \_\_\_\_\_ or snow. Finally, it collects back in lakes, rivers, seas and oceans.

#### WE DO

#### 8. Stick the stickers. Then present it.



### WE READ

This part provides a short story that includes the vocabulary and the application of the knowledge in the unit to real-life situations. Students have a chance to act it out.

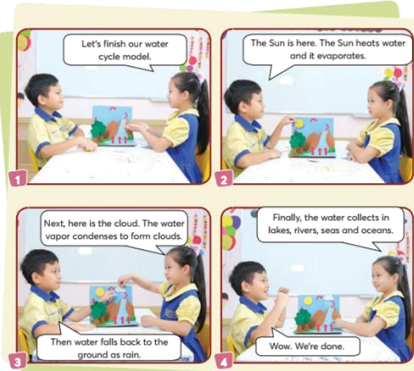
Students listen to the recording of the story.

Values are the moral message of the story.

#### WE READ

#### 9. Listen and read the story. Then act it out. 🎧 05

#### THE WATER CYCLE MODEL



#### VALUES

Know how water moves around between the air and land

#### 10. Read the story again. Circle and correct the mistake in each sentence.

1. The Sun freezes water and it evaporates. \_\_\_\_\_
2. Water vapor condenses to form snow. \_\_\_\_\_
3. Water falls back to the ground as vapor. \_\_\_\_\_
4. Water collects in skies, rivers, seas and oceans. \_\_\_\_\_

The story with real-life characters and situations. Students can follow the story and act it out.

An activity to check students' understanding about the story.





## UNIT 1: WATER

### Lesson 1

#### OBJECTIVES

**Knowledge:** Students will be able to

- identify three states of water: *liquid, gas* and *solid*.
- know how water moves around between the air and land.
- talk with a partner about three states of water and four stages in the water cycle.

**Vocabulary:** *water, liquid, water vapor, gas, ice, solid, boil, freeze, evaporate, condense, fall, collect*

#### MATERIALS

Textbook, teacher's guide, lesson plans, flashcards, audios, ...

#### WARMER

- Greet the class. Wave and say *Hello* and *Hi*. Then greet an individual student.
- Students can circulate and practice the greeting with three to four other students.
- If this is a new class for you, wait until students are seated, then say *Hello, my name's (your name). What's your name?* Go around asking students' names. Elicit *My name's ...* Ask students to greet each other and say their names.

#### LEAD IN

- Use the flashcards of 3 states of water.
- Raise the flashcards up to elicit the vocabulary for this lesson.
- Point and ask, "What state of water is it?"
- Model any words that students do not know.

#### MAIN CONTENT

##### WE LEARN

##### 1. Listen, point and repeat. 🎧 01


- Point to three states of water: *liquid, gas*, and *solid* to elicit the vocabulary for this lesson.
- Point and ask, "What's this?" Give names to each state. Tell the students to look at the pictures.
- Play the audio and say the new words in time with the recording.
- Play this part again for students to repeat the words. Point to each state of water to practice the words.

UNIT 1
WATER
LESSON 1

**WE LEARN**


1. Listen, point and repeat. 🎧 01

water




liquid

water vapor



gas

ice



solid


2. Listen and read. 🎧 02

There are three **states** of water: **liquid, gas** and **solid**.

- Water is a liquid at room temperature.
- When we **boil** water, it turns into a gas (water vapor).
- When we **freeze** water, it turns into a solid (ice).

3. What is the **water cycle**? Listen and read. 🎧 03

The water cycle shows how water moves around between the air and land. There are four stages in the water cycle.



#### Track 01

water	water
liquid	liquid
water vapor	water vapor
gas	gas
ice	ice
solid	solid

##### 2. Listen and read. 🎧 02

- Play the recording for students to listen to.
- Play the recording a second time for students to recognize the states of water in real life.
- Repeat more than once if necessary.

#### Track 02

There are three states of water: liquid, gas, and solid.

- Water is a liquid at room temperature.
- When we boil water, it turns into a gas (water vapor).
- When we freeze water, it turns into a solid (ice).

#### Extra practice

Have students work in groups. Ask them to find out more examples of things in the liquid, gas or solid state. Go around to help if needed.



### 3. What is the water cycle? Listen and read. 03

- Point to the picture and encourage the students to guess what happens in each stage of the water cycle.
- Play the recording for the first time and ask students to follow the text in their books.
- Explain new vocabulary in the text.
- Play the recording again and have students read along.
- Ask some students to present four stages of the water cycle.
- Give students some questions to check for understanding of the text.

#### Track 03

The water cycle shows how water moves around between the air and land.

There are four stages in the water cycle.

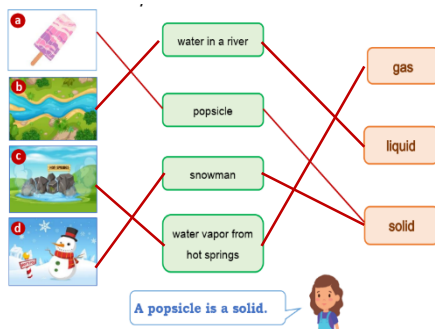
- Stage 1: The Sun heats water and it evaporates.
- Stage 2: Water vapor condenses to form clouds.
- Stage 3: Water falls back to the ground as rain or snow.
- Stage 4: Water collects in lakes, rivers, seas and oceans.

#### WE PRACTICE

##### 4. Look and match. Then say.

- Point to each picture, say the words, then ask students to repeat.
- Ask students to do the exercise individually.
- Check the answers.
- Have students make their sentences and say them in front of the class.

#### Answer



#### Mixed ability

- With weaker students, ask the students to read the sentences again.
- With stronger students, let them make sentences using their own ideas. Have students read the sentences in front of the class. Ask other students to listen and take notes.

**WE PRACTICE**

4. Look and match. Then say.

a

b

c

d

water in a river

ice lolly

snowman

water vapor from hot springs

gas

liquid

solid

**An ice lolly is a solid.**

5. Complete the sentences using the words from the box.

solid    liquid    three    boil    freeze

- Water has \_\_\_\_\_ different states.
- These states are liquid, gas and \_\_\_\_\_.
- We can find water in \_\_\_\_\_ form at room temperature.
- Water turns into water vapor when we \_\_\_\_\_ it.
- When we \_\_\_\_\_ water, it turns into ice.

6. Choose the correct answer.

- The Sun heats water and it \_\_\_\_\_.  
A. condenses    B. falls    C. evaporates
- Water vapor \_\_\_\_\_ to form clouds.  
A. condenses    B. boils    C. falls
- Water \_\_\_\_\_ back to the ground as rain or snow.  
A. falls    B. heats    C. collects
- Water \_\_\_\_\_ in lakes, rivers, seas and oceans.  
A. freezes    B. collects    C. condenses

#### 5. Complete the sentences using the words from the box.

- Ask students to read the words in the box and incomplete sentences.
- Have students volunteer to choose the correct word to complete each sentence.
- Give feedback and ask students to read complete sentences.

#### Answer

1. three    2. solid    3. liquid  
4. boil    5. freeze

#### 6. Choose the correct answer.

- Have students tell about four stages of the water cycle.
- Ask students to choose the correct answer.
- Have each of them read each sentence.
- Ask all the students to read the complete sentences.

#### Answer

1. C    2. A    3. A    4. B

#### Extra practice

**Whispering:** Have the class form one line. Whisper a sentence to the student at the beginning. Ask students to whisper the sentence along the line. No repeating allowed! When the sentence reaches the student at the end, have this student say the sentence.



## Lesson 2

### OBJECTIVES

**Knowledge:** Students will be able to

- listen, speak, and read about the three states of water and the four stages in the water cycle.
- understand a short story and act it out.
- review and consolidate language introduced in the unit.

**Values:** *Learn how water moves around between the air and land*

### MATERIALS

Textbook, teacher's guide, lesson plans, flashcards, audios, ...

### WARMER

**Slap the correct picture:** Stick the flashcards on the board. Divide the class into groups and call a representative of each group to come to the front. Read a sentence and ask students to race to slap the correct flashcard. Take turns playing until no flashcards are left.

### LEAD IN

- Tell the children they are going to do some activities to review what they have learned from lesson 1.
- Use flashcards to introduce three states of water and four stages in the water cycle.
- Say the words for the students to repeat to reinforce the meanings of the words.
- Show students the flashcards at random and ask them to say the words and the functions of each part.

### MAIN CONTENT

#### WE PRACTICE

#### 7. Listen and complete the text. 🎧 04

- Talk about three states of water and four stages of the water cycle.
- Read the text and ask students to guess the words.
- Listen to the recording for the first time.
- Call some students to give the answers.
- Listen again to check the answers.
- Invite some students to give the answers and check. Require students to read the whole sentences.

#### Answer

- |           |           |
|-----------|-----------|
| 1. liquid | 2. vapor  |
| 3. snow   | 4. states |
| 5. clouds | 6. rain   |

#### LESSON 2

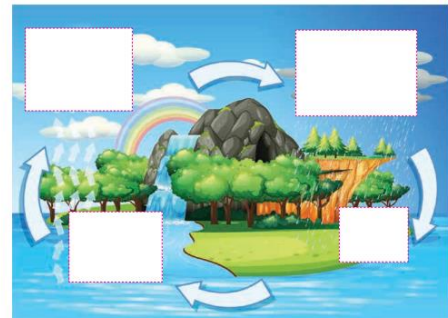
#### 7. Listen and complete the text. 🎧 04

Water can exist in three different states: liquid, gas and solid. Water is a (1) \_\_\_\_\_ at room temperature. In the gas state, water is called water (2) \_\_\_\_\_ or steam. In the solid state, water is in the form of ice or (3) \_\_\_\_\_. Water can change from one state to another when its temperature changes.

Let's see how water changes (4) \_\_\_\_\_ in the water cycle. Water changes to water vapor when the Sun heats it. Then water vapor condenses and forms (5) \_\_\_\_\_. Water falls from the clouds as (6) \_\_\_\_\_ or snow. Finally, it collects back in lakes, rivers, seas and oceans.

#### WE DO

8. Stick the stickers. Then present the water cycle to the class.



7

#### Track 04

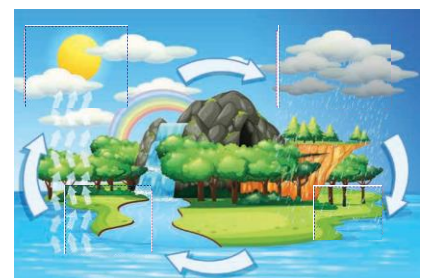
Water can exist in three different states: liquid, gas and solid. Water is a liquid at room temperature. In the gas state, water is called water vapor or steam. In the solid state, water is in the form of ice or snow. Water can change from one state to another when its temperature changes. Let's see how water changes states in the water cycle. Water changes to water vapor when the Sun heats it. Then water vapor condenses and forms clouds. Water falls from the clouds as rain or snow. Finally, it collects back in lakes, rivers, seas and oceans.

#### WE DO

#### 8. Stick the stickers. Then present it.

- Ask students to look at the picture.
- Show the stickers to them.
- Let students volunteer to put each sticker in the correct box.
- Have students check and present the picture in groups.
- Call each group to present in front of the class.

#### Answer





### Extra practice

Let students sit in groups of 5-6 students. Ask them to take turns to present the pictures. The other students listen and vote for the best picture and presentation. The best students can be received a present/ point/ star at the end.

### WE READ

9. Listen and read the story. Then act it out. 05

- Ask students to look at the story. Point to the characters in the story and ask: "Who's this?"
- Ask students to guess what happens in this story. Encourage students to share their ideas.
- Ask students to listen and point to the stages of the water cycle that they hear in the story.
- Demonstrate the story actions.
- Ask students to work in pairs.
- Encourage students to act out the story with the audio.
- Ask each pair of students to act out in front of the class.

#### Track 05

#### THE WATER CYCLE MODEL

**Mia:** Let's finish our water cycle model.

**Tim:** The Sun is here. The Sun heats water and it evaporates.

**Mia:** Next, here is the cloud. Water vapor condenses to form clouds.

**Tim:** Then water falls back to the ground as rain.

**Mia:** Finally, water collects in lakes, rivers, seas and oceans.

**Tim:** Wow. We're done.

### Mixed ability

- In pairs of stronger students, ask them to close their books and let them make a conversation together. For example:  
**Student A:** *How many stages are there in the water cycle?*  
**Student B:** *There are 4 stages in the water cycle.*
- The weaker students can take turns to practice reading the whole sentences in pairs. The teacher checks pronunciation carefully. For example: *The Sun heats water and it evaporates.*

**WE READ**

9. Listen and read the story. Then act it out. 05

### THE WATER CYCLE MODEL

Let's finish our water cycle model.

1

The Sun is here. The Sun heats water and it evaporates.

2

Next, here is the cloud. The water vapor condenses to form clouds.

3

Finally, the water collects in lakes, rivers, seas and oceans.

4

**VALUES** Learn how water moves around between the air and land

10. Read the story again. Circle and correct the mistake in each sentence.

1. The Sun freezes water and it evaporates. \_\_\_\_\_
2. Water vapor condenses to form snow. \_\_\_\_\_
3. Water falls back to the ground as vapor. \_\_\_\_\_
4. Water collects in skies, rivers, seas and oceans. \_\_\_\_\_

10. Read the story again. Circle and correct the mistake in each sentence.

- Allow time for students to do exercise. With stronger students, teachers can require them to close the book and do the exercise.
- Call some students to give the answers and check. Encourage students to read the whole sentence.

### Answer

- a. The Sun freezes water and it evaporates. heats
- b. Water vapor condenses to form snow. clouds
- c. Water falls back to the ground as vapor. rain
- d. Water collects in skies, rivers, seas and oceans. lakes

### Extra practice

Repeat if it's true: Teacher sticks a set of flashcards on The teacher points to one of the flashcards and say the functions. If the sentence is correct, repeat it. If the sentence is wrong, stay silent.