



## P5 PLT - Condensation\_Final - Submission to Community Library

### Learning Outcome(s)

Subject and Level

Subject	Level
Science	Primary 5

Content Map and Topic

2023

- Show an understanding of how water changes from one state to another.
  - Melting (solid to liquid)
  - Freezing (liquid to solid)
  - Boiling/Evaporation (liquid to gas)
  - Condensation (gas to liquid)

In this module, you will explore the process of condensation. You will learn how condensation occurs, and its significance in your daily lives. Through engaging activities and real-life examples, you will develop a deeper understanding of this essential physical phenomenon. By the end of the module, you will be able to identify instances of condensation and explain the science behind it.



## A. Learning About Condensation

In this section, you will be introduced to the concept of condensation. You will observe condensation using interactive and then consolidate your learning in a quiz.

## 1. Physical experiment - activity 2.3 (activity book)

Follow the instructions in activity 2.3 (activity book pages 49 to 51) and complete them.

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Activity 2.3: Condensation

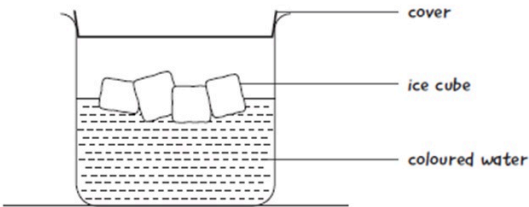
**Aim:** To find out what happens when water vapour loses heat

**What we need:** Beaker  
Water  
Food colouring  
Ice cubes  
Hot water  
Cover  
Magnetic whiteboards  
Reversible button magnets

**Let's Inquire**

**Part A: Using cold water**

1. Prepare a beaker of cold, coloured water as shown below.

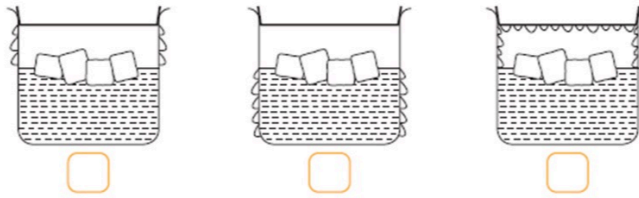


2. Touch the different parts of the beaker, as well as the cover. In the diagram above, highlight the colder parts using a highlighter.

Cycles in Water **49**

⊕ ⊖ ↺ ⬇

- 3. Observe your set-up for a few minutes and answer the following questions.
  - a Tick (✓) the diagram that shows where the water droplets were formed.



- b What was the colour of the water droplets formed?

\_\_\_\_\_

- 4. In groups, use the magnetic whiteboard and button magnets to explore and explain how the water droplets were formed.
  - a Where did the water droplets come from?

\_\_\_\_\_

- b Explain how the water droplets were formed.

\_\_\_\_\_

\_\_\_\_\_

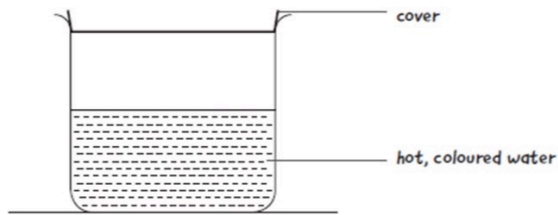
\_\_\_\_\_

**Part B: Using hot water**

- 1. Prepare a beaker of hot, coloured water as shown below.

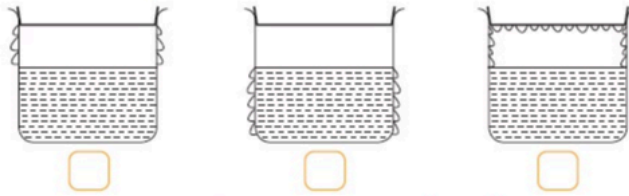


Do not touch the hot water directly. Be careful when handling hot objects.



- 2. In the diagram above, highlight the colder parts using a highlighter.

3. Observe your set-up for a few minutes and answer the following questions:
- Tick (✓) the diagram that shows where the water droplets were formed.



- What was the colour of the water droplets formed?

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4. In groups, use the magnetic whiteboard and button magnets to explore and explain how the water droplets were formed.
- Where did the water droplets come from?

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- Explain how the water droplets were formed.

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### Let's Conclude

When water vapour \_\_\_\_\_ heat, it changes into

\_\_\_\_\_. This process is called \_\_\_\_\_, where

a change in state from \_\_\_\_\_ to \_\_\_\_\_ occurs.



The scanned images were retrieved from the science activity book, CPDD, MOE on 11 April 2026

As you go through the activity, think of the following questions.

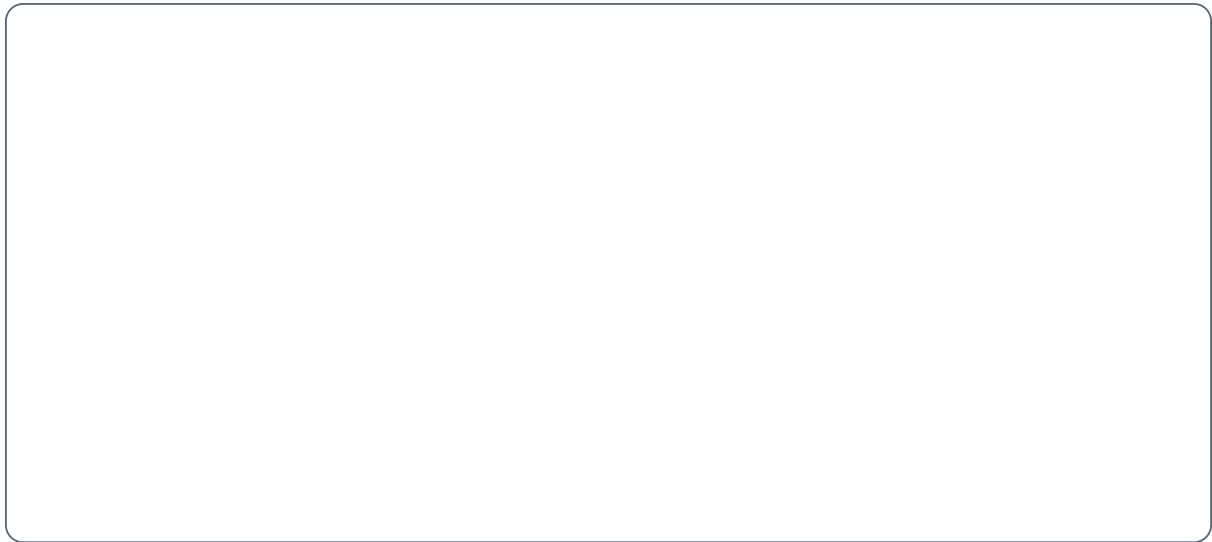
- 1) What is the change of states of water during condensation?
- 2) When does condensation happen?
- 3) Where would I see condensation?

After you have done the experiment, write your responses in the ITT below.

**ITT1**

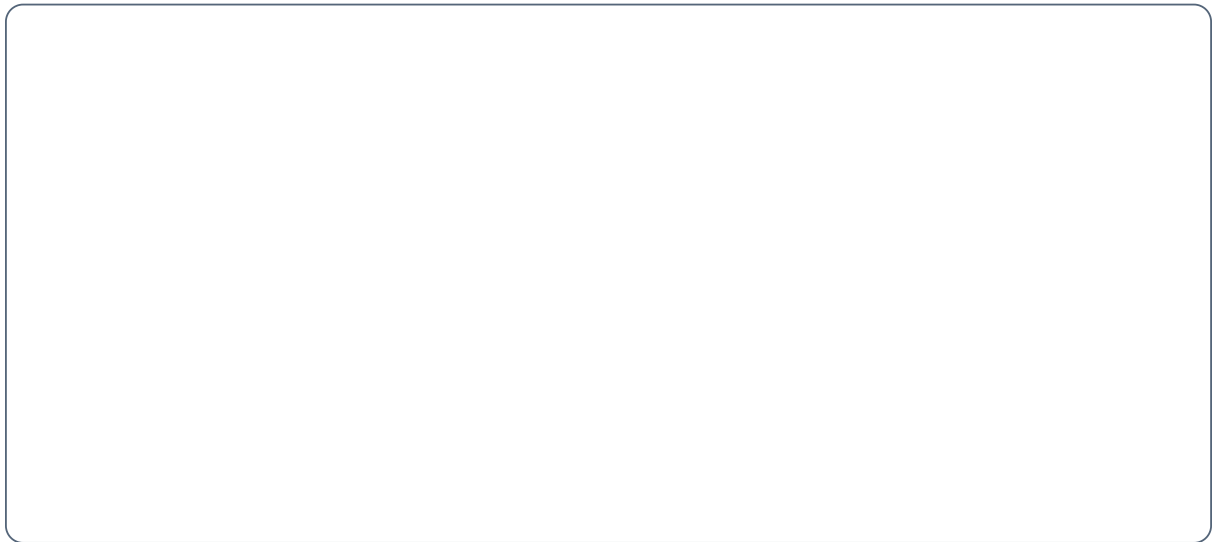
**See**

What is the change of states of water during condensation?



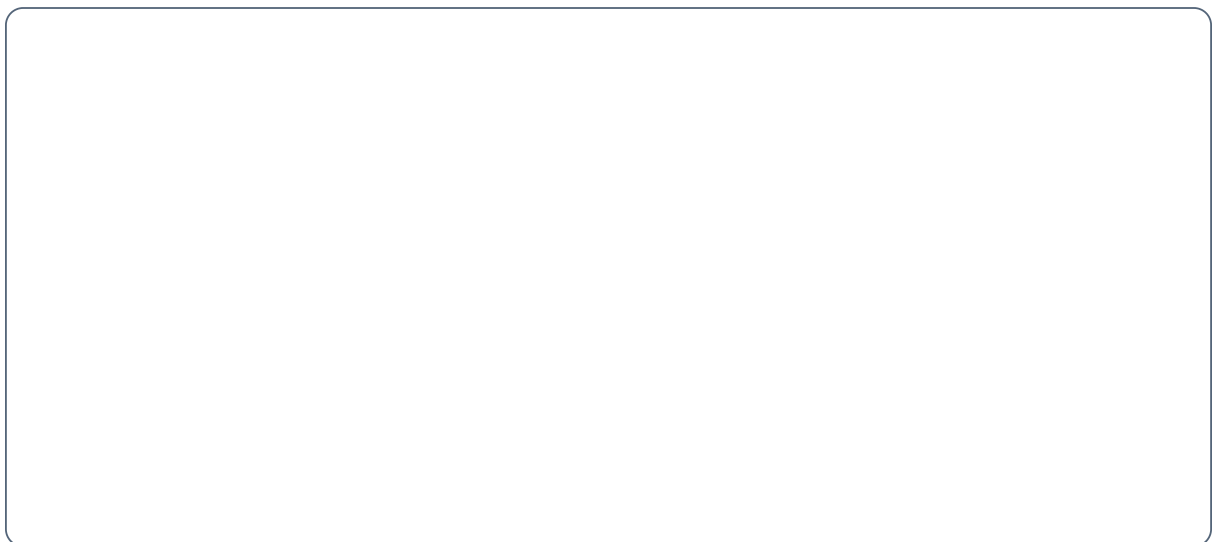
**Think**

When does condensation happen?



**Wonder**

Where would I see condensation?





## 2. Interactive Observation of Condensation

Water Temperature  
---°C

Room Temperature  
30°C

Temperature Difference  
---°C

Water Droplets Formed  
None

Room Temp

Pour Cold Water (5°C)    Pour Room Temperature Water (30°C)    Pour Hot Water (70°C)

Reset Glass

Interactive\_20260224032737.zip

The interactive is generated using the SLS on 11 April 2026.

You will use the above simulation to investigate how temperature affects condensation. You'll pour water at three different temperatures into covered beakers and observe what happens.

### Step-by-Step Instructions:

#### 1. Start the Simulation

- Click on the simulation to begin

#### 2. Conduct Your Investigation and Make Observations

- Pour cold water into the first beaker and observe
- Pour room temperature water into the beaker next and observe
- Pour hot water into the beaker last and observe

#### 3. Analyse Your Results

- Analyse the information in the result table
- Think about why each temperature produced different results
- Consider what this tells you about condensation in real life

#### 4. Test Your Understanding

- Complete the quiz to check what you've learnt about condensation



### 3. Condensation Quiz

#### Description

This quiz will assess students' understanding of the condensation process. It will include questions based on the interactive that they have observed.

#### Instruction to students

In this quiz, you will answer questions related to the process of condensation. Please fill in the blanks with the correct terms based on your understanding of the topic.

TOTAL MARKS  / 4

#### Q1:

RECOMMENDED ⌚ 1 min

Condensation is the process where  changes into .

#### 🔗 HINT 1

Think about what comes into contact with the cooler surface and what is formed on the cooler surface

MARKS:  / 2

#### Q2:

RECOMMENDED ⌚ 1 min

Condensation only takes place when there is a .

#### 🔗 HINT 1

Based on the simulation results, what did you observe about the temperatures when condensation takes place?

MARKS:  / 1

#### Q3:

RECOMMENDED ⌚ 1 min

During condensation, water droplets are formed on the  surface.

#### 🔗 HINT 1

Think about the different temperatures in the simulation, what did you notice about the temperature of the surface in comparison with other temperatures?

MARKS:  / 1



**You've reached the end of this quiz**



## B. Explaining Condensation in Our Daily Lives

In this section, you will explore the concept of condensation through real-life examples. You will learn to identify and explain instances of condensation, such as dew on grass, fog on windows, and water droplets on cold beverages. By observing your surroundings, you will gain a deeper understanding of this natural phenomenon. The CLC technique will be employed to enhance your explanations, while the SALIS method will encourage you to think critically about daily examples of condensation.



## 1. Examples on condensation (I do and We do)

I will teach you the **CLC** technique to explain condensation. Use this technique to help you.

C - water vapour from ?? comes into contact with cooler surface of ??

L - loses heat

C - condenses into water droplets on ??

Example 1: spectacles turning foggy when alighting from bus.



The image is generated using SLS on 11 April 2026.

Explanation

C - Water vapour from the surrounding air comes into contact with the cooler surface of the spectacles

L - loses heat

C- and condenses into into water droplets on the spectacles.



## 2. Examples on condensation (You do)

### Accordion

Use **CLC** technique to help you.

C - water vapour from ?? comes into contact with cooler surface of ??

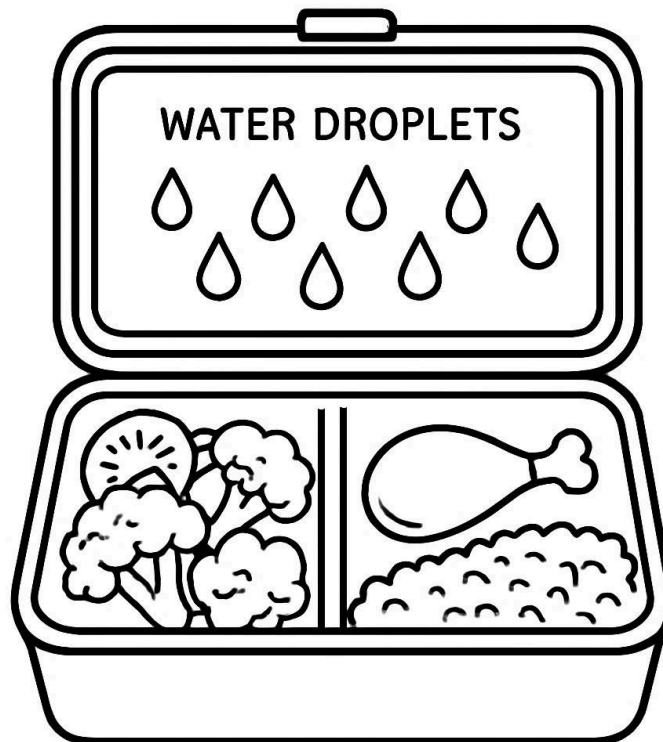
L - loses heat

C - condenses into water droplets on ??

Q1:

RECOMMENDED ⌚ 3 min

Mum packed a lunchbox for Siti. It was observed that there were water droplets on the underside of the cover of a lunchbox when she opened it.



The image is generated using SLS on 11 April 2026.

Use the CLC technique to explain condensation

C-  
L-  
C-

### Feedback

MARKS:  / 2



### 3. Extension of learning to my surrounding

Think of an example in your surrounding, at home or in school that shows condensation.

Use SALIS to confirm your example of condensation and your explanation on condensation. You can ask additional questions that you have on condensation.

Some questions that you can ask.

- 1) What is condensation?
- 2) How can I notice condensation?

Sentence starters

- 1) In my opinion, .....
- 2) I agree with ..... because .....
- 3) I disagree with ..... because .....



### Accordion

Use the **CLC** technique to help you.

C - water vapour from ?? comes into contact with cooler surface of ??

L - loses heat

C - condenses into water droplets on ??

### D1

Think of an example on condensation in your surrounding, at home or in school. Use the CLC technique to explain condensation.

Remember to use the CLC technique and write in the following format.

Example of condensation: \_\_\_\_\_

C - \_\_\_\_\_

L - \_\_\_\_\_

C - \_\_\_\_\_

After you are satisfied with your answer, write your responses in the ITT below.

### ITT1

#### Identifying condensation in our daily lives

Write your example on condensation in the following format below.

Example on condensation: \_\_\_\_\_

C - \_\_\_\_\_

L - \_\_\_\_\_

C - \_\_\_\_\_

If you have time, you can include a picture on the example of condensation.





### C. Exit Pass

This section is for you to consolidate your learning and reflect. You will continue to ask questions about condensation.



## 1. Consolidation of Learning

### ITT1

#### I have learnt

List down what you learnt about condensation.

#### I still need to understand

What other questions do you have?