



# Students' Scaffolding Series CRITICAL THINKING

# Pre-Session Activity

*Look at the boxes shown below. Each box is fully filled. They contain different objects as mentioned on them.*



*Which of these boxes will be the heaviest?*

- The cotton box*
- The iron ball box*
- The sand box*

## ***What do you think?***

1. The cotton box can not be the heaviest.
2. The iron box should be the heaviest.
3. The biggest box should be the heaviest.
4. Is there any other possibility?

***How many of you think 'there is any other possibility'?***

*What is that possibility?*

*There will be NO heaviest box as all contain SAME weight 1 kg of each object.  
The box sizes are different depending on the space occupied by cotton, iron ball and sand.*

# Learning Outcomes

After the session students will be able to know...

- **What** is critical thinking?
- **Why** is critical thinking important in our life?
- **How** do we improve critical thinking skills?

# What is Critical thinking?

It is the **objective analysis** and evaluation of a **problem** in order to get a **solution**.



# Icebreaking Activity



Make groups of four and discuss what will you do in the following situation:

You are alone at home. Someone is knocking at the door. He says I have brought a gift for you? Please open the door.



- (a) Would you open the door at once? Why or Why not?*
- (b) Would you tell the person to come later when your elders are back?*
- (c) Would you call the neighbour and ask them to collect the gift for you?*



## Let's Reflect!



- *Did you notice anything from the previous activity?*
  - We should **NOT** open the house gate for any stranger when we are alone. This is because we do not know who the person is. This is the situation where we need to think critically.
  - The other **TWO** options, that is, (b) and (c) are possible solutions to deal with this situation.
- ***Critical thinking is a part of our life, and we should use it whenever we are in doubt on dealing with a situation.***

# Case Study 1: Facing a Situation

*Sangeetha and Karan were playing 'catch the ball game' in the school playground.*



*While trying to catch the ball, Karan hurt his knee and it started bleeding.*

- Sangeetha got worried but she kept cool.
- She rushed him to the medical room for first aid. But the nurse was not there. She must have gone out for some work.
- Sangeetha saw the first aid box there.





Sangeetha thought what to do.

Should I wrap the bandage around the wound?  
What about the dust on the wound? It will  
cause infection.

*I must clean it first fresh water. She does the  
same.*

Should I put a band-aid on the wound?

I think before that I must clean the wound with  
the disinfectant to reduce chances of infection.

**Facts about Sangeetha:**

She is a **critical thinker**.

She did not loose control and thought of taking **constructive  
steps** in the given situation.

She worked **step by step, critically** analysing her actions.

She **successfully** handled the situation.



*She takes cotton and puts  
some disinfectant on it and  
cleans the wound and  
applies band-aid.*

# Case Study 1: Discussion Forum

- Had Sangeetha not thought critically, Karan would have been in pain and his wound may have caught infection.
- *Do you think she should have waited for the nurse? What is your view point?*
- *Do you think we should think critically in a situation?*
- *What would have you done if you were in place of Sangeetha?*

## Case Study 2: Getting Ready in Advance

- The Iyengar family has planned a trip to mountains.
- They are leaving on coming Sunday.
- Little Ann is excited about it.
- She enjoys **planning everything in advance**.
- She **watched a few videos** on travelling and made a checklist of things she wants to take with her.

- *Medicines*
- *Umbrella*
- *Torch*
- *List of emergency numbers*
- *Power bank and extra chargers*
- *Extra lock and key*
- *Extra pair of spectacles for her grandmother*



## Case Study 2: Discussion Forum

- Her sister once had a stomach upset after eating. **Medicine** was there.
- While coming back after some shopping, it started raining. **Umbrella** was there.
- Due to rain, the electricity went off in the hotel and the mobile was out of battery. **Power bank** was there for charging the mobile.
- Once, they got stuck in a dark place. **Torch** was there.
- Her grandmother lost her spectacles. Luckily she had **another pair of spectacles**.
  - *Had Ann not thought of the situation critically and well in advance!*
  - *Think of the problems her family could have faced.*

# Importance of Critical Thinking

*People use critical thinking for everything, from planning their day to planning for their future and everything in between.*





# Improving Upon Critical Thinking Skills

*Here are some ways that should help you improve your critical thinking skills.*

- Play games (indoor and outdoor)
- Make groups and share your experience with your friends, and ask them what they would have done in same situation
- Ask questions whenever you have doubts
- Read books
- Solve the question on the next slide...





## Activity – Critical Skills Through Mathematical Operations

*Using mathematical operations, list out ways in which you can get 40 as answer, few examples have been shared below. (For both primary and elementary level classes – Below examples to be taken only as **reference and not as your example**)*

a.  $30 + 10 = 40$

b.  $65 - 25 = 40$

c.  $20 * 2 = 40$

d.  $80 / 2 = 40$

# Tasksheet

*Here are given some situations. Read about them. Think critically and write what action will you take in each case and why.*

Situation	Your response and reason
1. A stranger offers you something to eat. Will you take and eat it?	
2. You are walking on the road. You see a dog sitting on a side. Will you tease the dog?	
3. Would you go out to play in a dark and lonely place away from your house?	
4. Your teacher is teaching a lesson. You have a query in your mind. Will you ask it or stay quiet?	
5. Your friend has not brought his/her lunch. Will you share your food with him/her?	

