

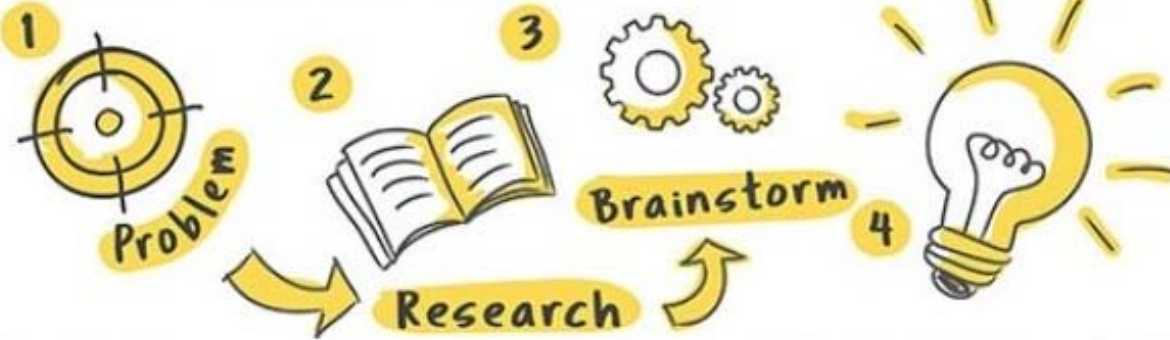
# BE CREATIVE

problem >> solution

“Think outside the box”

VISION

IMPOSSIBLE



Students' Scaffolding Series  
CREATIVE THINKING

# Pre-Session Activity

*There is a tank full of water.  
Also, there is an empty bucket.  
There are two measuring vessels.  
By one vessel, we can transfer 5 litres of  
water, and by another we can transfer 3 litres  
of water.*

*We need to transfer 4 litres of  
water from the tank to the  
bucket by using the  
measuring vessels minimum  
number of times.*



*Is this possible? If yes, how many times you need to  
use each vessel?*

## Pre-Session Activity (contd..)

*What do you think?*

1. How will you plan the transfer of water?
2. Which vessel will use first to transfer water?
3. Which vessel will be used only once?
4. Is there any other possibility?

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

*What is that possibility?*

*Since we need to use the measuring vessels the minimum number of times, so there will be only one possible way.*

# Learning Outcomes

- What is creative thinking?
- What are the qualities of a creative thinker?
- What is the process of creative thinking?
- How to develop creative thinking skills?

# What is Creative Thinking?

- Creative thinking is the ability to come up with **new approaches and ideas**.
- It is also the ability to generate new ideas by **combining, changing and reapplying the existing ideas**.



- If you are a creative thinker, you will know that there is always a **scope for improvement**.

# Reflection Activity



***Have you ever seen a leaking tap where water is falling from the tap drop by drop?***

**Think of some way where you can convince people that each drop of water is important and thousands of litres of water is lost even from a single leaking tap.**



- Assume 1 drop of water falls each second.
- Find number of drops that fall in one hour and then in one day.
- Find number of drops that fall in one year.
- Assume 1 drop is equal to 1 ml of water.
- Find the quantity of water lost by all drops in 1 year (more than 30000 litres).

# Reflection

***In this activity, what did you notice?***

- Leaking tap is a common sight.
- How many of us actually bother about this drop by drop water loss?
- Did any one of us ever realise such a huge quantity of water is lost just from a single leaking tap.

***A creative thinker looks at things from a different angle!***

# Qualities of a Creative Thinker

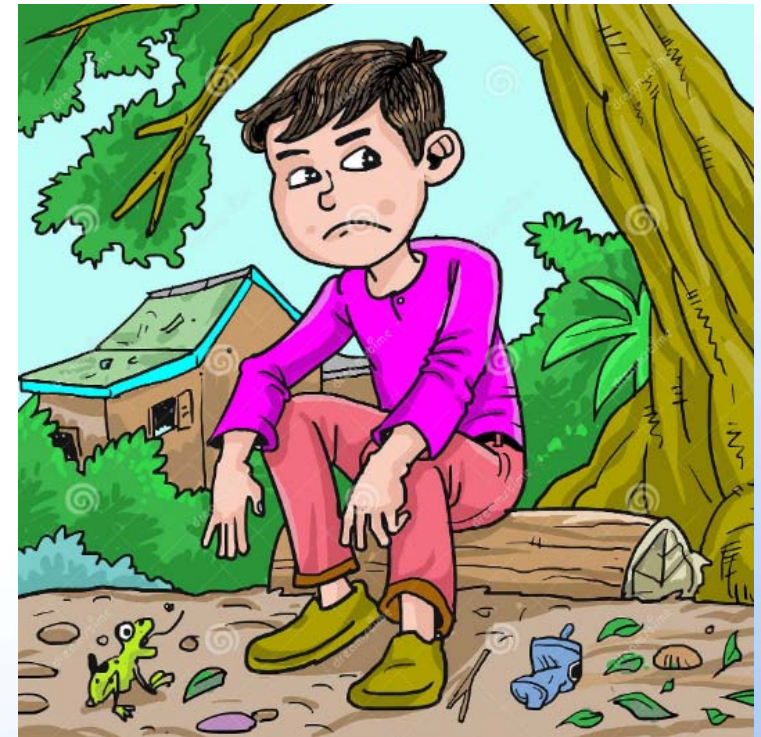




# Case Study 1: Thinking of possibilities

The summer vacations are about to start.  
All children are excited.  
Some of them are going out of village to their relatives.  
Some are going to hill stations.  
*Rahul, is, however, sad as he is not going anywhere in these vacations.*

- *Do you think Rahul should be sad?*
- *Is there nothing for him to do in vacations?*
- *Is there anything that Rahul can do and be happy?*



## Case Study 1: (contd..)

Rahul woke up early on the coming Sunday morning and went out for a walk in the park. He sat on a big stone and looked around. He started thinking.

After some hard thinking he became happy and went back home.



*Can you tell what made him happy? And why?*

## Case Study 1: (contd..)

He realised that he can

- *learn gardening from his grandfather.*
- *learn how to grow crops from his father.*
- *learn cooking from his mother.*
- *try his hands at drawing.*
- *recycle waste objects and make some useful things out of them.*



**There is so much a CREATIVE THINKER can do!**

# Qualities of a Creative Thinker

- *A creative thinker never gives up.*
- *A creative thinker looks for all possibilities.*
- *A creative thinker is always optimistic.*
- *A creative thinker knows that there is a scope for improvement.*

***Each one of us has substantial amount of creative thinking.***

# Process of Creative Thinking

## 1. RESEARCH

Identify the problem and collect all information you need

## 2. IDEATING

Start to combine your thoughts

## 3. THINKING

Put all your ideas in one place

## 4. BRAINSTORMING

Evaluate your solution

## IMPLEMENTATION

Apply your ideas and evaluate the result

## Activity: How CREATIVE you are?

*During the covid-19 Lockdown, we saw the world being creative.*

List any 3 creative things you did during the time.

**A. In studies**

**B. In your family**

**C. In your neighbourhood**

# Student's Activity (contd..)

***Continuing with the activity from the previous slide, rate yourself from 5 to 1.***

- A. If you are happy with your work give yourself **5** marks.
- B. If you feel you could have been more creative if you would have spent some more time on it, give yourself **4** marks.
- C. If you are now thinking of improving what you created, give yourself **3** marks.
- D. If you tried to create something it but could not complete it, give yourself **2** marks.
- E. You have an idea but could not make it, give yourself **1** mark.

# Developing Creative Thinking Skills

## *Taking Initiative*



1. Take initiative
2. Think independently.
3. Do something you enjoy.
4. Go out time to play.
5. Ask open ended questions.
6. Read good books.

7. Display your work with your loved ones.
8. Listen and think about their feedback.
9. Look for multiple answers or alternatives.





# Tasksheet 1: Homework



All of us know about environment pollution.  
Our Government needs our support to stop this pollution.  
We hear that we should not use articles made of plastic as these are a danger for our environment.

*Write three ways where you can replace use of plastics.*



Water is important for us.

*Write two ways where you can save water by recycling or reusing it.*

# Tasksheet 2: Classroom Activity



**Step 1:** Make groups of four.

**Step 2:** Think of a problem and note down it on a paper. On a separate paper, write best possible solution from your point of view.

**Step 3:** Exchange the problem paper among your group members and write their best possible solutions from your perspective.

**Step 4:** Discuss various solutions written by each of you for the same problem, one by one. Try to conclude what is the best solution among those and why.

*Such kind of activities broadens your vision and stimulates thinking. Try to involve in such group discussions as and when possible.*

