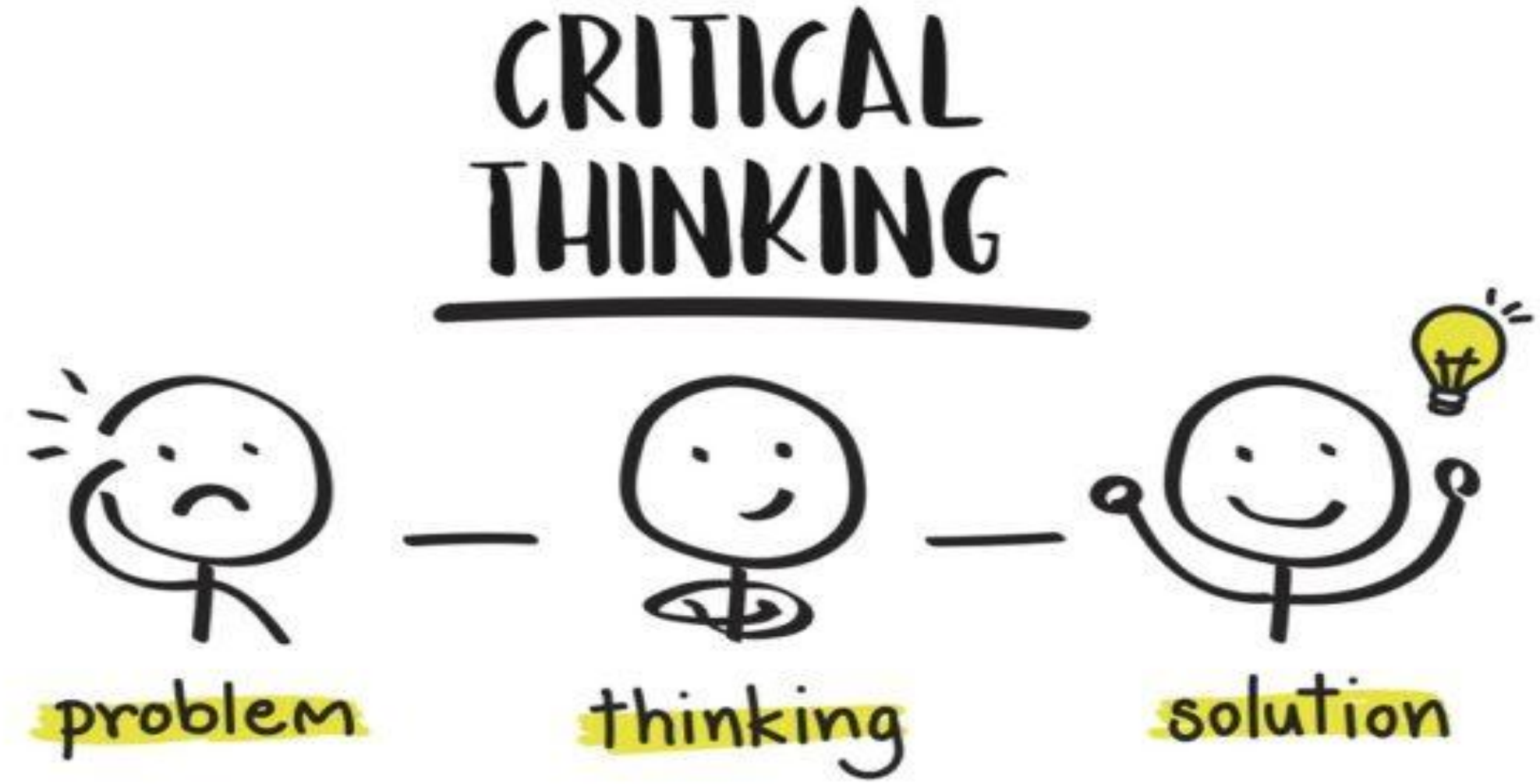

CRITICAL
THINKING
problem
thinking
solution

Critical Thinking

- **Critical Thinking** is the ability to carefully analyze information, question assumptions, and make well-reasoned decisions instead of blindly accepting ideas or opinions.
- **Critical thinking** is the process of analyzing facts, evidence, and information objectively to form a judgment and make a well-reasoned decision or conclusion.
- **Critical thinking** is the ability to think clearly and rationally about what to do or what to believe
- **Critical thinking** can be described using several synonyms, including analytical thinking, problem-solving, logical reasoning, and evaluation.
- **Critical thinking** is like Google Maps—it helps you explore different routes before choosing the best one.

Critical Thinking

•It's like putting on **"thinking glasses"** to see the problem clearly from all angles.

•Instead of saying "I think this is correct," critical thinking asks **"Why do I think this? What evidence supports it? Could there be another explanation?"**

•It involves:

1. **Asking questions** – Why? How? What if?
2. **Checking facts** – Is it true? What's the proof?
3. **Comparing options** – Which is better and why?
4. **Making logical conclusions** – Based on evidence, not emotions.

Why Critical Thinking is Important

- **Improved Decision-Making:**

It helps individuals weigh options, consider potential outcomes, and make more informed choices.

- **Effective Problem-Solving:**

By logically assessing issues and potential solutions, critical thinkers can find better and more innovative answers.

- **Navigating Information:**

In an era of information overload, critical thinking enables people to distinguish misinformation from reliable sources and understand complex data.

- **Career Advancement:**

Employers highly value critical thinking as a soft skill for assessing situations and providing logical resolutions.

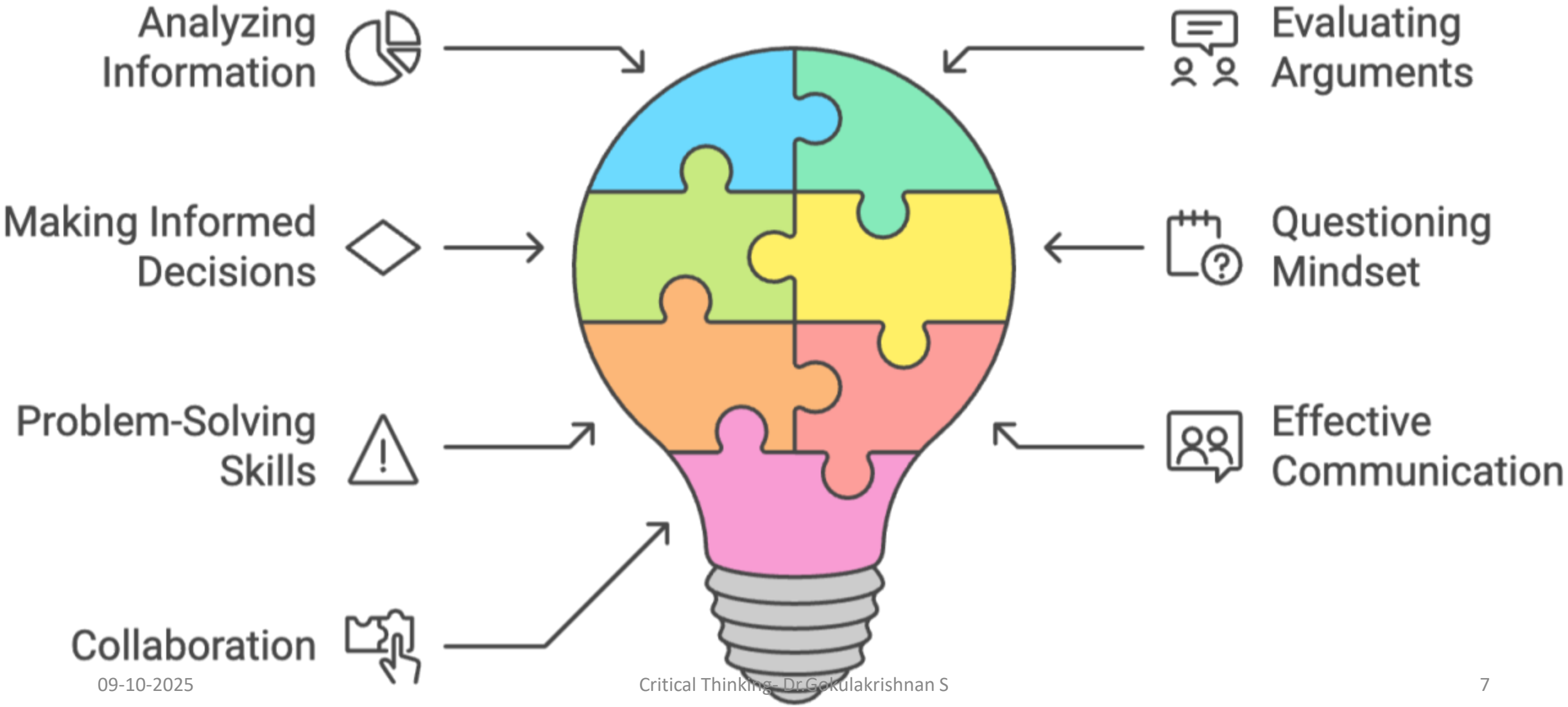
What is 5 critical thinking?

- Five critical thinking skills are: analysis, evaluation, inference, explanation, and self-regulation. These skills help individuals examine information objectively, identify patterns, draw logical conclusions, and refine their own thinking processes.

What are the 7 steps of critical thinking?

- Identifying The Problem
- Gathering Information
- Analyzing The Data
- Identifying Assumptions
- Reaching A Conclusion
- Presenting The Solution
- And Analyzing The Decision

The Components of Critical Thinking



How to Develop Critical Thinking Skills

- **Ask Questions**: Cultivate a mindset of curiosity. Always ask “Why?” and “How?” to dig deeper into issues.
- **Reflect Regularly**: Take time to reflect on your decisions and thought processes. What went well? What could have been done better?
- **Engage in Active Learning**: Stay informed by reading widely, attending workshops, and engaging in discussions. The more you know, the better you can evaluate information critically.
- **Seek Feedback**: Don’t be afraid to ask others for their input. Fresh perspectives often highlight biases or blind spots in your own thinking.
- **Practice Problem-Solving**: Deliberately challenge yourself with complex problems, both at work and in personal life. The more you practice, the more natural critical thinking will become.

Real-Life Example

- *"Drinking 5 cups of coffee a day cures headaches."*
- **Without critical thinking:** You believe it and start drinking 5 cups.
- **With critical thinking:** You check medical sources, ask doctors, read research, and then decide whether it’s true.

Real-Life Example - Social Media News

- **Situation:** A message goes viral: *“All exams are canceled this week.”*
- **Without critical thinking:** Students skip studying and wait for an official announcement that never comes.
- **With critical thinking:** Students check the university website or contact faculty before making any decision.

Real-Life Example-**Health Advice**

- **Situation:** A blog says *“Eating only fruits for 30 days will make you healthy.”*
- **Without critical thinking:** You start the diet right away.
- **With critical thinking:** You consult a nutritionist, read health studies, and understand risks before changing your diet.

Real-Life Example-Career Decisions

- **Situation:** A friend tells you *“AI jobs are disappearing soon.”*
- **Without critical thinking:** You decide not to study AI.
- **With critical thinking:** You research job trends, talk to experts, and analyze reports before choosing a career path.

➢ Icebreaker Activity – Thinking Challenge (10 min)

Activity:

"You have a 3-liter and a 5-liter jug. How will you measure exactly 4 liters?"

➢ Icebreaker Activity – Thinking Challenge (10 min)

Method A (fastest)

- Fill the 5-L jug.
- Pour from 5-L into 3-L (the 3-L becomes full). → Left in 5-L: 2 L
- Empty the 3-L. Pour the 2 L from 5-L into the 3-L.
- Fill the 5-L again.
- Pour from 5-L into the 3-L until the 3-L is full (it already has 2 L, so you add 1 L).

  → Left in 5-L: 4 liters ✅

➢ Icebreaker Activity – Thinking Challenge (10 min)

- **Method B (alternative)**
- Fill the 3-L and pour into 5-L.
- Fill the 3-L again and top up the 5-L (you'll add 2 L), leaving **1 L** in the 3-L.
- Empty the 5-L. Pour the **1 L** from 3-L into the 5-L.
- Fill the 3-L and pour into the 5-L.

→ In 5-L: **4 liters** ✅

➢ Icebreaker Activity – Thinking Challenge (10 min)

Method C (different path to 4L, ends with 3L full)

Fill 5L → **(5,0)**

Fill 3L → **(5,3)**

Empty 3L → **(5,0)**

Pour 5L → 3L → **(2,3)**

Empty 3L → **(2,0)**

Pour 5L → 3L → **(0,2)**

Fill 5L → **(5,2)**

Pour 5L → 3L (add 1L to make 3L full) → **(4,3)** ✅

➢ Icebreaker Activity – Thinking Challenge (10 min)

Method D (another longer variant, still valid)

Fill 5L → **(5,0)**

Pour 5L → 3L → **(2,3)**

Fill 5L → **(5,3)**

Empty 3L → **(5,0)**

Pour 5L → 3L → **(2,3)**

Empty 3L → **(2,0)**

Pour 5L → 3L → **(0,2)**

Fill 5L → **(5,2)**

Pour 5L → 3L → **(4,3)** ✅

➢ Icebreaker Activity – Thinking Challenge (10 min)

Method E (finishes with the small jug empty)

Fill 3L → **(0,3)**

Pour 3L → 5L → **(3,0)**

Fill 3L → **(3,3)**

Pour 3L → 5L (fills 5L; 3L keeps 1L) → **(5,1)**

Empty 5L → **(0,1)**

Pour 3L → 5L → **(1,0)**

Fill 3L → **(1,3)**

Pour 3L → 5L → **(4,0)** ✅

➢ Icebreaker Activity – Thinking Challenge (10 min)

Why solutions exist

Because **gcd(5,3) = 1**, you can measure any whole number of liters from 1 to 5 using these two jugs; 4L is guaranteed to be reachable by some sequence.

Homework:

“Write one page about a situation where you or someone you know could have made a better decision using critical thinking.”

Understand the Scope of Unit–1

Etymology & Definitions → Learn where the term *critical thinking* comes from and different definitions given by scholars.

Needs → Why do we need critical thinking in studies, work, and daily life?

Enablement of Knowledge → How critical thinking helps us transform information into useful knowledge.

Methods → The approaches or techniques used to think critically (e.g., questioning, analyzing, comparing, evaluating).

1. Etymology of Critical Thinking

1. Etymology of Critical Thinking

The word *critical* comes from the **Greek word *kritikos*** meaning *to judge, to discern*.

Root: *krinein* → "to separate, to decide."

Thinking refers to the process of reasoning, reflecting, and forming judgments.

So, "critical thinking" = the ability to judge or evaluate information, ideas, or arguments carefully and rationally.

2. Definitions of Critical Thinking

2. Definitions of Critical Thinking

Different scholars provide slightly different definitions, but they all point to **clear, reasoned, and reflective judgment**:

Richard Paul (1995): *Critical thinking is disciplined thinking that is clear, rational, open-minded, and informed by evidence.*

Edward Glaser (1941): *Critical thinking is the ability to think logically about what to do or believe, including skills of reasoning and reflection.*

APA Delphi Report (1990): *Critical thinking is purposeful, self-regulatory judgment that gives reasoned consideration to evidence, context, methods, and criteria.*

👉 **In simple terms:** Critical thinking means analyzing facts before forming an opinion or decision.

3. Needs of Critical Thinking

Why do we need it?
Critical thinking is important in **studies, work, and daily life**:

In Studies

- Helps to evaluate sources, not just memorize.
- Encourages asking *why* instead of blindly accepting information.

In Work/Profession

- Improves decision-making and problem-solving.
- Essential for leadership, teamwork, and innovation.

In Daily Life

- Protects us from manipulation, fake news, or bias.
- Helps in making rational personal decisions (e.g., financial planning, choosing a career, resolving conflicts).

👉 **Without critical thinking, people may fall into errors, biases, and poor decision-making.**

4. Enablement of Knowledge

4. Enablement of Knowledge

Information vs Knowledge:

Information = raw data (facts, numbers, events).

Knowledge = organized, understood, and applied information.

Critical thinking enables this transformation:

By **questioning** information (Is it true? Reliable?)

By **analyzing** context (Where does it come from?)

By **evaluating** sources (Evidence or opinion?)

By **synthesizing** ideas (connecting concepts together).

4. Enablement of Knowledge

Example:

Reading a headline → “Chocolate cures stress.”

Without critical thinking → Believe it blindly.

With critical thinking → Check the research, look at evidence, compare with other studies, then decide if it’s valid.

👉 **Critical thinking turns passive learning into active knowledge creation.**

5. Methods of Critical Thinking

5. Methods of Critical Thinking

Some practical approaches/techniques:

Questioning Assumptions

Don’t accept statements at face value. Ask: *Why? How? What if?*

Analyzing Arguments

Identify claim, evidence, and conclusion.

Ask: *Is the reasoning valid? Is there bias?*

Comparing Perspectives

Look at an issue from different viewpoints before deciding.

5. Methods of Critical Thinking

- **Evaluating Evidence**
- Check sources, facts, and reliability.
- **Reflective Thinking**
- Think about your own thinking → Am I being logical or emotional?
- **Problem-Solving Approach**
- Define the problem clearly.
- Gather information.
- Generate alternatives.
- Evaluate options → Choose best solution.

Quick Summary Table

Component	Key Idea	Example
Etymology	From Greek kritikos = to judge	Judge truth of a claim
Definitions	Clear, rational, evidence-based thinking	“Thinking about thinking”
Needs	For studies, work, and daily life	Avoid fake news, solve problems
Enablement of Knowledge	Turns info → useful knowledge	Fact-checking a headline
Methods	Questioning, analyzing, comparing, evaluating	“Why should I believe this?”

Warm-up Activity (10 min)

- “Please write **three personal definitions** of critical thinking. These don’t have to be perfect or from a book — just what comes to your mind. For example, you might say:
- **‘Critical thinking means checking if information is true.’**
- **Or, ‘Critical thinking is solving problems step by step.’**
- Each of you can write three simple ideas like that.”

Discussion Starter: Where do we use critical thinking?

- **“In what areas of life do you need to think carefully before deciding?”**

Discussion Starter: Where do we use critical thinking?

👉 Exams & studies, career choice, handling money, relationships, politics, social media, shopping, or teamwork.

Discussion Starter: Where do we use critical thinking?

- **Dilemma:** *Should exams focus only on memorization or on application-based questions?*

Discussion Starter: Where do we use critical thinking?

- **Pros (memorization):** Easy to grade, ensures basic knowledge.
- **Cons (memorization):** Doesn’t test real understanding, encourages rote learning.
- **Pros (application-based):** Tests problem-solving, creativity.
- **Cons (application-based):** Harder to evaluate, stressful for some students.

Enablement of Knowledge (20 min)

- Learn how critical thinking turns information into knowledge.
- Activity: Take a newspaper article → Identify **facts vs opinions**. Discuss how separating them improves understanding.

Enablement of Knowledge: Facts vs Opinions Activity (Metro Example)

- **Example Newspaper Article**
- *"The new metro line was inaugurated yesterday by the Chief Minister. Around 20,000 passengers used the metro on the first day. Many commuters said the metro will reduce traffic congestion in the city. However, some critics argue the project was too expensive and the funds should have been used for improving public buses."*

Enablement of Knowledge: Facts vs Opinions Activity (Metro Example)

Step 1: Identify Facts

- The new metro line was inaugurated yesterday.
- The Chief Minister inaugurated the metro.
- Around 20,000 passengers used the metro on the first day.

Step 2: Identify Opinions

- “The metro will reduce traffic congestion in the city.” (prediction, not a proven fact yet).
- “The project was too expensive.” (value judgment).
- “Funds should have been used for improving public buses.” (alternative viewpoint, opinion).

Enablement of Knowledge: Facts vs Opinions Activity (Metro Example)

- **Step 3: Discussion Questions**
- Why is it important to separate facts from opinions in this article?
- Which part gives **reliable knowledge**?
- How could mixing opinions with facts affect people's understanding of the metro project?
- 👉 **Key Insight:** Critical thinking helps us filter facts (evidence) from opinions (judgments). This turns raw information into **reliable knowledge**.

Enablement of Knowledge: Facts vs Opinions Activity (Metro Example)

- **Article 1: Metro Benefits**
- "The metro line between North and South City started last week. According to officials, the trains are running every 10 minutes. Many passengers said they can now reach offices in half the time compared to buses. Supporters believe the metro will make the city cleaner by reducing vehicle pollution."
- ✅ **Facts**
- The metro line between North and South City started last week.
- The trains are running every 10 minutes (official report).
- Passengers can reach offices in half the time compared to buses.
- ✅ **Opinions**
- “The metro will make the city cleaner.”
- “Many passengers said it is much better than buses.” (subjective).

Enablement of Knowledge: Facts vs Opinions Activity (Metro Example)

- **Article 2: Metro Criticism**
- *"The East City metro extension opened yesterday after two years of construction. The project cost nearly ₹5,000 crores. Some residents complained that ticket prices are too high for daily travel. Critics argue that the money spent on the metro should have been used to fix existing road infrastructure."*
- ✅ **Facts**
- The East City metro extension opened yesterday.
- Construction took two years.
- The project cost nearly ₹5,000 crores.
- ✅ **Opinions**
- “Ticket prices are too high for daily travel.”
- “The money should have been used to fix roads instead.”

Methods of Critical Thinking

- ✦ **Techniques to Introduce:**
- **Questioning Assumptions** – Not accepting ideas blindly. Ask: *What am I taking for granted?*
- **Analyzing Arguments** – Breaking arguments into claim, evidence, conclusion.
- **Comparing Perspectives** – Looking at an issue from multiple viewpoints before deciding.
- **Evaluating Evidence** – Checking if information is reliable, valid, and unbiased.
- **Reflective Thinking** – Thinking about your own thought process: *Am I being logical?*

Methods of Critical Thinking

- **Activity: Higher-Order Questions Practice**
- 👉 **Scenario**
  "Your city is planning to ban private vehicles two days a week to reduce traffic and pollution. Instead, people should use public transport like buses and metro."

Methods of Critical Thinking

- **Step 1 –Higher-Order Questions**
- **Why?**
  - *Why would the city government propose such a ban?*

    How?
  - *How could this policy affect students, workers, and businesses?*

    What if?
  - *What if the public transport system is not reliable or safe enough?*

Methods of Critical Thinking

- **Scenario 2: Social Media Ban in Schools**
- *"The school management is considering a rule to ban mobile phones and social media apps during school hours."*
- **Questions & Example Responses:**
- **Why?**
  - To reduce distractions, prevent cyberbullying, improve focus in class.
- **How?**
  - Students may concentrate better, but may also feel restricted.
  - Teachers may find it easier to maintain discipline.
- **What if?**
  - What if students need phones for research or emergencies?
  - Students might hide phone use secretly → discipline issues.
- 👉 *Methods practiced: Questioning assumptions (Are phones always bad?), comparing perspectives (students vs teachers vs parents).*

Methods of Critical Thinking

- **Scenario 3: Online vs Offline Education**
- *"After the pandemic, some universities suggest continuing with online classes permanently, while others insist on returning to face-to-face learning."*
- **Questions & Example Responses:**
- **Why?**
  - Online: saves time, reduces costs, flexible.
  - Offline: better interaction, practical learning, social skills.
- **How?**
  - Online may help rural students access courses, but may increase screen fatigue.
  - Offline helps hands-on learners, but may be costly for travel.
- **What if?**
  - What if internet access is unequal?
  - What if students lose motivation without physical interaction?
- 👉 *Methods practiced: Analyzing arguments (pros & cons), evaluating evidence (research on learning outcomes).*

Methods of Critical Thinking

- **Scenario 4: Artificial Intelligence in Jobs**
- *"Many companies are adopting AI tools that can do tasks previously done by humans. Some people worry this will lead to unemployment."*
- **Questions & Example Responses:**
- **Why?**
  - To increase efficiency, reduce costs, automate repetitive tasks.
- **How?**
  - Workers may lose certain jobs but new roles (AI maintenance, data analysis) may be created.
  - Society may face challenges in reskilling.
- **What if?**
  - What if AI makes mistakes or is biased?
  - What if workers cannot adapt fast enough?
- 👉 *Methods practiced: Reflective thinking (impact on future), comparing perspectives (workers, employers, society).*

Unit II: Common Denominators

- **1. Introduction**
- In mathematics, *common denominator* = a shared factor among different fractions.
- In **critical thinking**, *common denominators* = the **shared elements or standards of good reasoning** that apply across subjects, professions, and daily life.
- Why important? Because no matter the field (science, law, business, or personal life), we rely on the same **basic habits of mind**: clarity, logic, fairness, evidence.

2. Key Common Denominators of Critical Thinking

- **1) Clarity**
- Ideas must be expressed clearly, not vaguely.
- Example: Instead of saying *“This plan will work”*, say *“This plan will reduce traffic by 25% in 2 years.”*
- **2) Accuracy**
- Ensure statements are correct and verified.
- Example: Check sources before believing a headline.
- **3) Relevance**
- Stick to information that matters for the issue.
- Example: In an exam answer, don’t include unrelated stories.

2. Key Common Denominators of Critical Thinking

- **4) Logic**
- Conclusions should follow from evidence and premises.
- Example: *“All engineers study math. Ramesh is an engineer. Therefore, Ramesh studies math.”*
- **5) Evidence**
- Opinions must be supported by data or facts.
- Example: A scientific claim must show experimental results.
- **6) Fairness**
- Consider all perspectives, avoid personal bias.
- Example: A teacher grading assignments should not favor friends.

3. Application Across Fields

- **Science** → Hypotheses tested with clarity, evidence, accuracy.
- **Law** → Judge applies fairness, logic, relevance.
- **Engineering** → Design choices rely on accuracy, logic, evidence.
- **Everyday Life** → Deciding on career, purchases, or friendships needs fairness and clarity.

4. Examples

- **Case 1: Choosing a Smartphone**
  - Without critical thinking: *“I’ll buy the one my friend uses.”*
  - With critical thinking: Compare specs (accuracy), price vs features (relevance), read reviews (evidence), check own budget (fairness).
- **Case 2: News Article on Pollution**
  - Clarity: What exactly is claimed?
  - Accuracy: Is the data correct?
  - Evidence: Are sources reliable?
  - Fairness: Consider industries vs environment perspectives.

5. Class Activities

- **Activity 1 – Fact vs Opinion Sorting**
- Statements:
- “Chocolate is sweet.” (Fact – clarity & accuracy)
- “Chocolate is the best food.” (Opinion – lacks evidence)
- “The Earth orbits the Sun.” (Fact – accuracy & evidence)

→ **QUESTION:** Which denominator is missing when statements are misleading?

Activity 2 – Group Scenario Analysis

- Scenario: *A city must choose between building a new metro line or improving bus services.*
- Group task: Identify what common denominators (clarity, accuracy, relevance, evidence, fairness) should guide the decision.
- Discussion points:
  - Accuracy: Cost estimates.
  - Evidence: Population surveys.
  - Fairness: Rich & poor commuters.
  - Relevance: Does it solve traffic?

6. Quick Recap Questions

- What does “common denominator” mean in critical thinking?
- Why is clarity important in communication?
- Give one example where fairness improves a decision.
- Which denominator is missing if someone spreads rumors without checking?

7. Reflection Exercise

- to think of a **recent decision,** you made (e.g., buying clothes, preparing for exams, handling a conflict).
- Which common denominators did they use? Which ones did they ignore?
- Write a short 5–6 line note.

8. Conclusion

•Critical thinking is not different for each subject; it relies on **shared principles** → clarity, accuracy, relevance, logic, evidence, fairness.

•These are the *common denominators* that make reasoning reliable and applicable in any context.

Tests and Values — Evaluating Ideas through Reasoning

- **1. Introduction: What Are Tests and Values?**
- **a) Tests**
- "Tests" in critical thinking are **methods to check** whether an idea, statement, or argument is valid, true, or useful.
- We use tests to **evaluate evidence**, **assumptions**, and **reasoning** before accepting a conclusion.
- **Example:**
  Claim → "Energy drinks improve concentration."
  Tests to apply:
- **Evidence Test:** Is there research proof?
- **Logic Test:** Does caffeine always mean better focus?
- **Value Test:** Is it safe for students' health?

Tests and Values — Evaluating Ideas through Reasoning

- **b) Values**
- Values are the **ethical, cultural, and personal principles** that guide our judgments.
- They influence how we interpret evidence and make decisions.
- Critical thinkers must **balance facts and values** — logic and empathy.
- **Examples of Values:** honesty, fairness, respect, sustainability, compassion.

2. Types of Critical Thinking Tests

Type of Test	Purpose	Example
Clarity Test	Is the idea clearly stated?	“Education should be better” → What does ‘better’ mean?
Relevance Test	Is the argument connected to the issue?	In a pollution debate, personal stories may be irrelevant.
Accuracy Test	Are the facts correct?	Check data sources or scientific reports.
Logic Test	Do conclusions follow from reasons?	If A → B, and B → C, then A → C.
Evidence Test	Is there strong proof?	Government reports, data, expert opinions.
Ethical Test	Is the decision morally acceptable?	Animal testing for cosmetics — ethically right or wrong?

3. Values in Reasoning

- Reasoning is not only about logic but also **about what we value** as right or important.
- Our **values affect our interpretation** of facts.
- **Example 1 – Decision with Conflicting Values:**
  A company must choose between profit (business value) and environment (moral value).
  Critical thinking asks: *"Can we find a solution that balances both?"*
- **Example 2 – Personal Level:**
  A student must choose whether to report a friend who cheated.
- Logic says: Cheating is wrong → must report.
- Value says: Loyalty to a friend → protect them.
  A critical thinker weighs both — and seeks the **fairest** outcome.

4. Steps to Evaluate an Idea Using Tests and Values

Step	Action	Example
1	Identify the idea or claim	“Online classes are better than classroom learning.”
2	Test for clarity	Define “better” (convenience? learning outcomes?).
3	Test for accuracy	Check research comparing both methods.
4	Test for logic	Does the evidence truly support the claim?
5	Test for evidence	Are sources reliable? Peer-reviewed?
6	Test for values	Does it support equality and access for all?
7	Make conclusion	“Online classes improve flexibility but may reduce personal engagement.”

5. Real-Life Examples

- **Example 1: Ethical Test**
- Claim: “Facial recognition should be used in public for safety.”
- **Logic Test:** It can identify criminals faster.
- **Value Test:** It invades privacy.
  ✅ Conclusion: Acceptable only with strong data protection laws.

5. Real-Life Examples

- **Example 2: Relevance Test**
- Claim: “Students should wear uniforms to improve discipline.”
- “Uniforms improve focus.” (Relevant)
- “Uniforms make everyone look same.” (Irrelevant to focus)
  ✅ Keep only relevant reasons.

5. Real-Life Examples

- **Example 3: Evidence Test**
- Claim: “Reading fiction improves empathy.”
- Check studies, data, psychological research.
  ✅ Reliable evidence supports the claim.

Activity – Value Conflict Discussion (10 min)

- **Ask:** “What would you do if your friend cheats in an exam?” Students discuss logic vs values:
- **Logic** → Rules must be followed.
- **Value** → Friendship and loyalty.

- **concludes:** *Critical thinking doesn’t ignore values — it balances them with reason.*

Quick Recap

- Critical thinking uses **tests** (to verify reasoning) and **values** (to guide ethical decisions).

Good thinkers don't just ask *"Is it true?"* but also *"Is it right, fair, and meaningful?"*

Reflection Questions

- Why do we need both logical and ethical tests in decision-making?
- Can a decision be logical but not ethical? Give an example.
- Which value do you use most when making tough choices — honesty, fairness, or empathy? Why?

Scenario 1 – The Exam Dilemma

- You are writing your final exam. The student next to you (your best friend) is copying answers.
  If you report them, they may fail. If you stay silent, it’s unfair to others.

- **Question:** What will you do and why?

Scenario 2 – The Social Media Post

- You find a viral post claiming: *“Drinking lemon water cures cancer.”* Your relatives are forwarding it in a family group.

- **Question:** Would you ignore it, forward it, or verify it first?

Scenario 3 – The Scholarship Decision

- You are the student council member selecting candidates for a scholarship.
  One applicant is your close friend with slightly lower marks. Another has higher marks but you don’t know them.

- **Question:** Who should receive the scholarship?