## Critical Thinking

Definition: the process of applying, analyzing and evaluating information gathered from observation, experience, reasoning or communication.

Types:

**Analysis**: Evaluating information and statistics to draw conclusions.

**Reasoning**: Making decisions based of facts rather than emotions.

**Problem-Solving**: Resolving challenges by considering perspectives.

# Fallacies

**Definition**: Logical Fallacies are errors in reasoning that undermine the logic of an argument.

**Types**:

**Slippery Slope:** Suggests that a minor action will lead to significant consequences.

Example. If I sell drugs, then I will go to jail and then I will get a criminal record and then I wont get a job, and also no one will hire me and also my parents and family will disown me.

**Poisoning the Well**: discredits the opponent’s argument by presenting unfavorable information about them beforehand.

Example. Before you listen to her on climate change, remember she doesn’t recycle.

**Appeal to Emotion**: Attempts to persuade by bringing out an emotional response rather than using logical arguments.

Example: You need to hire me because I need this to support my family.

**Red Herring**: Introduces irrelevant information to distract from the main issues.

Example: Why worry about climate change when we have so many homeless people.

**Authority**: Claims something is true simply because an authority figure endorses it.

Example: My doctor say lime is good for your eyes, so it must work.

**False Dilemma**: Presents two possible options as the only possibilities when others exists.

Example: Either you support my proposal or you don’t care about our future.

**Ad Hominem**: Attacks the person making the argument rather than the argument itself.

Example: You can trust his opinion on healthcare because he has no medical training.

## Arguments

**Deductive Argument**: is one where the conclusion necessarily follows from the premises. If the premises is true, then the conclusion must be true.

Example: People in Tanteen does thief; John lives in Tanteen; therefore John is a thief.

**Inductive Argument**: involves reasoning from specific premises to form general conclusions.

Example: The bus picks us up at 8:00 every morning; therefore the bus will pick us up at 8:00 tomorrow morning.

## Fact vs. Opinion

**Fact**: A statement proven to be true or false based on experience or evidence.

Example: Orange is a citrus fruit.

**Opinion**: A subjective belief or judgment that cannot be proven.

Example: Chocolate ice-cream is the best flavor ice-cream.

**Claim of Fact**: A statement that can be verified through evidence or observation.

Example: The earth revolves around the sun.

**Claim of Value**: A statement that expresses a judgment about something’s worth.

Example: Honesty is more important than success.

**Claim of Policy**: A statement that advocates for a specific course of actions or policy change.

Example: The government should implement stricter regulations on pollution.