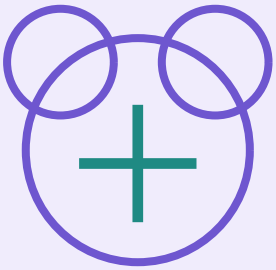
AP PSYCHOLOGY | UNIT 2

TOPIC 2.2

Thinking and Decision-Making

Mental categories, strategies, shortcuts, and biases shape how people solve problems and make choices.



organize -> choose -> act

thinking uses strategies and shortcuts

A THINKING PATHWAY

ORGANIZE
concepts + schemas

→

SOLVE
algorithm / heuristic

→

JUDGE
biases + framing

→

CREATE
new possibilities

BY THE END, YOU SHOULD BE ABLE TO...

1. Explain concepts, prototypes, schemas, assimilation, and accommodation.
2. Compare algorithms and heuristics and identify common decision biases.
3. Connect executive functions and flexible thinking to creativity.

BIG IDEA

Efficient thinking often relies on shortcuts. Those shortcuts save time, but they can also create predictable errors.

1 Organize and solve

Mental categories make information manageable; strategies determine how a problem is attacked.

CONCEPTS, PROTOTYPES, AND SCHEMAS

CONCEPT

A mental category that groups similar items.

PROTOTYPE

The ideal or best example used to judge category membership.

SCHEMA

A mental framework that organizes and interprets information.

NEW INFORMATION →

- **ASSIMILATION** — keep the schema
- **ACCOMMODATION** — change the schema

PROBLEM-SOLVING STRATEGIES

ALGORITHM

Systematic, step-by-step, and thorough. More likely to find a solution, but often slower.

ACCURATE | SLOW

HEURISTIC

A mental shortcut that is fast and efficient, but may produce a biased or incorrect judgment.

FAST | ERROR-PRONE

MENTAL SET — A previously successful strategy can become the default, even when a different approach would work better.

2 Judgment and creativity

Choices are shaped by what comes to mind, how options are presented, and how flexibly a person thinks.

COMMON JUDGMENT SHORTCUTS AND ERRORS

REPRESENTATIVENESS

Judge by similarity to a typical example or stereotype.

AVAILABILITY

Judge by examples that are vivid or easy to recall.

FRAMING + PRIMING

Wording or prior exposure changes how a choice is interpreted.

GAMBLER'S FALLACY

Assume a random outcome is due because of earlier outcomes.

SUNK-COST FALLACY Continue a poor choice because time, money, or effort has already been spent.

EXECUTIVE FUNCTIONS AND CREATIVITY

EXECUTIVE FUNCTIONS

Generate, organize, plan, monitor, and carry out goal-directed behavior. These skills also support critical thinking.

FLEXIBLE THINKING

Divergent thinking generates many possibilities. Convergent thinking narrows toward one answer.

FUNCTIONAL FIXEDNESS Seeing an object only in its usual role blocks creative solutions. Ask: what else could it do?