



Mindgle's Cognitive Architecture for Natural Intelligence Prompting

For Mindgle, prompts should not begin with Artificial Intelligence. They should begin with Natural Intelligence. Before learners search for information, they first organise their own thinking through Mentelix. Each prompt should deliberately move the learner from wonder → curiosity → inquiry → Refined Inquiry Question.

Unit 1: Natural Intelligence (NI) Prompt Orchestration (Inquiry Design)

1.1 The Journey from Wonder to a Refined Inquiry Question

Goal

Understand how wonder becomes a meaningful inquiry.

Prompts

- What has genuinely captured my attention?
- Why am I curious about this?
- What makes this worth investigating?
- What do I not yet understand?
- What kind of question am I ultimately trying to ask?
- Why does this inquiry matter?
- What would I like to understand by the end of this inquiry?



1.2 Activating Mentelix for Metacognitive Inquiry

Goal

Organise your thinking before searching.

Prompts

- What am I thinking right now?
- Why am I thinking this way?
- What do I already know?
- What am I assuming without evidence?
- Which of my ideas are facts and which are opinions?
- Am I rushing towards answers too quickly?
- Have I fully understood my own thinking before asking AI?

1.3 Identifying the Stimulus and Wonder

Goal

Recognise what triggered the inquiry.

Prompts

- What exactly did I observe?
- What surprised me?
- What feels confusing or incomplete?
- Why did this capture my attention?
- Is this an observation, a problem, a contradiction, or a phenomenon?
- What makes this different from ordinary curiosity?



- What would happen if I ignored this question?

1.4 Discovering an Inquiry Worth Pursuing

Goal

Separate interesting facts from meaningful inquiry.

Prompts

- Is this question worth investigating?
- Does this inquiry help explain something important?
- Is this simply a fact, or is there a deeper problem to understand?
- Could this inquiry improve understanding or solve a real problem?
- Would investigating this create meaningful knowledge?
- Is there enough complexity to justify investigation?
- Why should someone care about this inquiry?

1.5 Identifying the Knowledge Gap

Goal

Discover what remains unknown.

Prompts

- What do I already know?
- What do I think I know?
- What do I still not understand?
- What questions remain unanswered?



- Where is the biggest gap in my understanding?
- Which part of this inquiry needs the most investigation?
- What knowledge must I build before I can answer this question?

1.6 Investigating Contradictions, Tensions, and Trade-offs

Goal

Recognise complexity.

Prompts

- What contradictions do I notice?
- What ideas seem to conflict?
- Are there competing explanations?
- What tensions exist between different viewpoints?
- What trade-offs might exist?
- Is this issue more complex than I first thought?
- What makes this inquiry difficult to answer?

1.7 Identifying Stakeholders

Goal

Recognise who is connected to the inquiry.

Prompts

- Who is affected by this issue?
- Who benefits?



- Who may be disadvantaged?
- Whose voice have I not considered?
- Which communities are connected to this inquiry?
- Which organisations or systems influence this issue?
- Have I overlooked anyone important?

1.8 Exploring Multiple Perspectives

Goal

View the inquiry through different lenses.

Prompts

- How would a scientist explain this?
- How would a psychologist explain this?
- How would an economist explain this?
- How would another culture understand this?
- How might different stakeholders disagree?
- Which perspective challenges my own thinking?
- What perspectives are still missing?

1.9 Clarifying the Purpose of the Inquiry

Goal

Understand what the inquiry is trying to accomplish.

Prompts



- Am I trying to explain something?
- Am I trying to compare ideas?
- Am I trying to evaluate a claim?
- Am I trying to predict an outcome?
- Am I trying to solve a problem?
- Am I trying to challenge an existing belief?
- What is the real purpose of my inquiry?

1.10 Refining the Inquiry

Goal

Transform curiosity into a researchable question.

Prompts

- Is my question specific enough?
- Is my question focused?
- Can this question be investigated using evidence?
- Is the scope too broad?
- Can I make this question clearer?
- Does every word in my question matter?
- How can I improve this inquiry?

1.11 Constructing the Refined Inquiry Question (RIQ)

Goal



Design the intellectual blueprint for investigation.

Prompts

- Does my question clearly express what I want to understand?
- Is my inquiry purposeful?
- Is it focused?
- Is it researchable?
- Will this question guide a meaningful investigation?
- Does it encourage evidence rather than opinion?
- Is this the strongest question I can ask?

1.12 Reflection: How has my thinking changed?

Goal

Reflect before beginning investigation.

Prompts

- How has my thinking changed?
- How is my final question different from my first question?
- What assumptions did I discover?
- What surprised me during this process?
- What do I now understand about my own thinking?
- What still remains uncertain?
- Am I ready to begin investigating this inquiry?



Mindgle Meta-Prompts (Ask Throughout Unit 1)

Wonder

- Why did this capture my attention?
- What makes this interesting?
- Why should this matter?

Thinking

- What am I assuming?
- What do I already know?
- What do I still need to understand?

Inquiry

- Is this worth investigating?
- What knowledge gap am I trying to fill?
- What is the real question?

Perspectives

- Who sees this differently?
- Whose voice am I missing?
- What other ways could this be understood?



Refinement

- Can my question become clearer?
- Is it focused enough?
- Will this question guide meaningful investigation?

Reflection

- Has my thinking become clearer?
- Have I moved from curiosity to inquiry?
- Am I ready to activate AI?

Mindgle Natural Intelligence Prompt Orchestration Ladder

***Wonder → Stimulus → Metacognition → Knowledge Gap → Contradictions →
Stakeholders → Perspectives → Purpose → Inquiry Refinement → Refined Inquiry
Question (RIQ) → Reflection***