## Prompt-Template Cheat Sheet

A concise guide to five core scaffolds for AI prompting

# Quick Overview

Prompt Template	Length	CoT Exposure	Clarification	Self- Review	Best Domain	Adoption
Universal Expert Al	Short	Minimal (summary only)	✓ Yes	Implicit	General- purpose	~90%
Ultimate Universal AI Prompt	Long	Full	✓ Yes	Implicit	Teaching / onboarding	~5%
Fractal Reasoning Loop (FRL)	Long	Full	<b>X</b> No	Yes (explicit)	Debugging / research	~2%
Shortened FRL	Very short	Partial (tweak required)	<b>X</b> No	✓ Yes (≤2 passes)	Prompt craft / ideation	~3%
RAAIP	Short	None (silent)	Conditional	Yes (silent loop)	High-stakes factual checking	Niche

ii Feature-by-Feature Comparison

Aspect	Universal Expert Al	Ultimate Universal AI Prompt	FRL	Shortened FRL	RAAIP
Task Breadth	All domains (tech, creative, advisory)	Tutoring, walkthroughs	Technical puzzles, math- heavy	Broad (depends on prompt context)	Safety- critical domains only
Flow of Conversation	Fast: understand → solve → present	Slower: checklist-style	Verbose, multi- stage	Fast, concise loop (2-pass limit)	May hesitate; clipped answers
Policy Exposure	Minimal (summary- level CoT)	Full reasoning shown (policy tension)	Full transparency (often disallowed)	Partial (requires summary- tweak)	Reasoning is silent by design
Flexibility	Adaptive, clarifies where needed	Rigid; follows structured flow	Hard-coded, no clarification	Flexible, but missing clarification	Inflexible, pass/fail gates only
User Readability	Clean and concise	Long meta-text; slower to read	Dense "lab report" feel	Short and user-friendly	Terse, not learner- friendly
Template Maintenance	Lightweight, low upkeep	Verbose; can become bloated	Specialized; hard to adapt	Minimal upkeep; highly portable	Rarely changed; expert-only

# Pros & Cons Breakdown

Prompt	Advantages	Limitations
Universal Expert Al	<ul> <li>Quick and flexible</li> <li>Clarification</li> <li>built-in</li> <li>Policy-aligned</li> </ul>	• No explicit review loop• Needs hints for unusual formats

Prompt	Advantages	Limitations
Ultimate Universal Al Prompt	• Excellent for structured learning• Clear code/math walk-throughs	• Verbose and rigid• CoT policy exposure risk
Fractal Reasoning Loop	• Deep self-review• Encourages critical thinking	• High overhead• No user clarification
Shortened FRL	• Compact and creative• Teaches prompt engineering	<ul> <li>Missing clarification</li> <li>Partial reasoning only</li> </ul>
RAAIP	• Strong validation• Ensures safety in regulated domains	• Not creative • Lacks transparency for learners

#### Deep Dive: Scaffold Descriptions

### 1. Universal Expert Al

- **Essence**: Lean four-stage loop (Understand → Choose Modality → Solve → Present).
- Strengths: Fast, adaptable, default-friendly, policy-compliant.
- Weaknesses: No explicit self-review loop; occasional prompt hints needed.
- **Best For**: Daily use—general chat, coding, planning, writing.

#### 2. Ultimate Universal AI Prompt

- **Essence**: Five checkpoint stages (Understand → Adapt → Solve → Clarify → Align).
- Strengths: Step-by-step thinking; ideal for educational and instructional contexts.
- **Weaknesses**: Verbose, slow; exposes entire chain-of-thought.
- **Best For**: Onboarding, tutorials, classroom settings.

#### 3. Fractal Reasoning Loop (FRL)

Essence: Reflexion-based loop (Explore → Diverge → Draft → Self-Review → Optimize).

- Strengths: Lateral thinking, in-depth critique.
- Weaknesses: No clarification step; heavy resource load; policy conflict risk.
- Best For: Technical audits, complex reasoning workflows.

#### 4. Shortened FRL

- Essence: Two-pass mini-loop (Spot → Rewrite → Compare → Deliver).
- Strengths: Ideal for fast iteration, creative exploration, prompt design.
- Weaknesses: Needs clarification hack; not full CoT by default.
- **Best For**: Ideation, workshops, compact outputs.

#### 5. RAAIP

- **Essence**: Silent validation graph → facts, physics, logic → pass/fail.
- Strengths: Strict safety filters; great for compliance and factual correctness.
- Weaknesses: Refuses ambiguous queries; minimal explainability.
- Best For: Aerospace, health tech, formal audits.

#### **6** Final Recommendations

# Use Case Recommended Scaffold

General Q&A, planning, coding, creative tasks <a>Universal Expert AI</a>

Teaching, tutoring, walkthroughs 
Ultimate Universal AI Prompt

Prompt writing, brainstorming, ideation Shortened FRL (with tweak)

Compliance, factual validation, safety checks RAAIP

Tip: Choose the smallest scaffold that meets your need for correctness, clarity, and policy alignment.