Routine	Key Thinking Moves	Notes
		Routines for Introducing & Exploring Ideas
See-Think-Wonder	Describing, interpreting, and wondering	Good with ambiguous or complex visual stimuli
Zoom In	Describing, inferring, and intrepreting	Variation of STW involving using only portions of an image
Think-Puzzle-Explore	Activating prior knowledge, wondering, planning	Good at the beginning of a unit to direct personal or group inquiry and uncover current understandings as well as misconceptions
Chalk Talk	Uncovering prior knowledge and ideas, questioning	Open-ended discussion on paper. Ensures all voices are heard, gives thinking time.
321 Bridge	Activating prior knowledge, questioning, and connection making through metaphors	Works well when students have prior knowledge but instruction will move it in a new direction; can be done over extended time like the course of a unit
Compass Points	Decision making and planning, uncovering personal reactions	Solicits the group's ideas and reactions to a proposal, plan, or possible decision
Explanation Game	Observing details and building explanations	Variation of STW that focuses on identifying parts and explaining them in order to build up an understanding of the whole from its parts and their purposes
	Rout	Routines for Synthesizing & Organizing Ideas
Headlines	Summarizing, capturing the heart	Quick summaries of the big ideas or what stands out
CSI: Color, Symbol, Image	Capturing the heart through metaphors	Nonverbal routine that forces visual connections
Generate-Sort-Connect- Elaborate: Concept Maps	Uncovering and organizing prior knowledge to identify connections	Highlights the thinking steps of making an effective concept map that both organizes and reveals one's thinking
The 4 C's	Connection making, identifying key concept, raising questions, and considering implications	A text-based routine that helps identifies key points of complex text for discussion; demands a rich text or book
Micro Lab	Focusing attention, analyzing, and reflecting	Can be combined with other routines and used to prompt reflection and discussion
l used to think	Reflecting and metacognition	Used to help learners reflect on how their thinking has shifted and changed over time
	R	Routines for Digging Deeper into Ideas
What makes you say that?	Reasoning with evidence	A question that teachers can weave into discussion to push students to give evidence for their assertions
Circle of Viewpoints	Perspective taking	Identification of perspectives around an issue or problem
Step Inside	Perspective taking	Stepping into a position and talking or writing from that perspective to gain a deeper understanding of it
Red Light, Yellow Light	Monitoring, identifying of bias, raising questions	Used to identify possible errors in reasoning, over-reaching by authors, orareas that need to be questioned
Claim Support Question	Identifying generalizations and theories, reasoning with evidence, making counter arguments	Can be used with text or as a basic structure for mathematical and scientific thinking
Tug of War	Perspective taking, reasoning, identifying complexities	Identifying and building both sides of an argument or tension/dilemma
Word-Phrase-Sentence	Summarizing and distilling	Text-based protocol aimed at eliciting what a reader found important or worthwhile; used with discussion to look at themes and implications.

Thinking Routines Matrix

PZ PROJECT ZERO

N HALLEN C cultures 0/thinking

Ritchhart, R., Church, M. & Morrison, K. (2011). Making thinking visible: How to promote engagement, understanding, and independence for all learners. San Francisco, CA: Jossey-Bass. (p. 51-52). Explore more Thinking Routines at pz.harvard.edu/thinking-routines. Find more Thinking Routines and application strategies in the Making Thinking Visible and The Power of Making Thinking Visible books.