ARTFUL THINKING MATRIX from http://pzartfulthinking.org/

Thinking Disposition	Thinking Routine	Use When You Want Students to	Steps
REASONING	WHAT MAKES YOU SAY THAT? Good starting point for deeper thinking - can be followed by other routines.	 Describe what they see or know and provide evidence and explanation (evidence based reasoning). Provide text or graphic evidence for thinking and writing. 	 What's going on (happening) in the picture? What makes you say that?
	CLAIM/SUPPORT/QUESTION Use with works of art, pieces of text, poems, and with topics in the curriculum that invite explanation or are open to interpretation.	 Reason and provide evidence or support, especially with topics in the curriculum that are open to interpretation. Practice argument writing skills. 	 Make a claim about the artwork or topic (An explanation or interpretation of some aspect of the artwork or topic). Identify/provide support for your claim (things you see, feel, and know that support your claim.) Ask a question related to your claim (What's left hanging? What isn't explained? What new reasons does your claim raise?)
QUESTIONING & INVESTIGATING	THINK/PUZZLE/EXPLORE Works particularly well when beginning a topic, and when you want students to develop their own areas of interest.	 Connect to prior knowledge. Develop own questions of investigation. 	 What do you think about this artwork or topic? What questions or puzzles do you have? What does the topic or artwork make you want to explore?
	CREATIVE QUESTIONS	 Make inferences. Develop good questions. Think deeply about a topic. 	Brainstorm a list of at least 12 questions about the artwork or topic. Using starters: Why? What are the reasons? What if? What is the purpose of? How would it be different if? Suppose that What if we knew? What would change if?
	SEE/THINK/WONDER Versatile, easy to use, and almost never fails to deepen students' interest in the topic at hand	 Make careful observations and thoughtful interpretations. Make inferences. Distinguish between observations and interpretations Stimulates curiosity and help students reach for new connections 	 What do you see (hear)? What do you think about that? What does it make you wonder?
OBSERVING & DESCRIBING	BEGINNING/ MIDDLE/ END A springboard for imaginative exploration.	 Make observations and use their imagination to elaborate on and extend their ideas. Look for connections, patterns, and meanings. Develop writing or storytelling (narrative) skills and sequencing. 	 Choose one of the 3 questions: If this artwork is the beginning of a story, what might happen next? If it this artwork is the middle of a story, what might have happened before? What might be about to happen? If this artwork is the end of a story, what might the story be?

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OBSERVING & DESCRIBING	LOOKING/LISTENING: 10X2	 Make careful observations about an object, image or work of art. Generate/brainstorm descriptive words or phrases for a pre-writing, discussion activity. 	 Look at a piece of art/listen to piece of music for 30 seconds. List 10 words or phrases about any aspect of what you see or hear. Share words. Repeat.
	COLORS/SHAPES/LINES	 Observe details. Generate/brainstorm descriptive words or phrases. Prepare for formal analysis of Art 	 What colors do you see? Describe them. What kinds of shapes do you see? Describe them. What kinds of lines do you see? Describe them.
	THE ELABORATION GAME	 Develop a detailed descriptive vocabulary. Elaborate. Distinguish between what they see and what they interpret. Practice narrative, expository writing skills. 	 One person identifies a specific section of the artwork and describes what he or she sees(hears). Another person elaborates on the first person's observations by adding more detail about the section. A third person elaborates further by adding yet more detail, and A fourth person adds yet more.
COMPARING & CONNECTING	I USED TO THINK NOW I THINK Use it after reading new information, exploring or making an artwork, watching a film, listening to a speaker, experiencing something new, having a class discussion, and so on.	 Reflect on how their ideas and impressions have changed over time. Recognize and consolidate new understandings, opinions, and beliefs, Become more reflective, self-aware learners. 	Write or say a few sentences using each of the sentence stems: I used to think (topic, artwork or object) Now, I think (topic, artwork or object)
	CONNECT/EXTEND/CHALLENGE A natural place to use this routine is after students have experienced something new. Try it as a reflec- tionduring a lesson, after a longer project, or when completing a unit of study. Try using it after another routine!	 Make connections between new ideas and prior knowledge. Reflect on/assess their learning and increase metacognition. Review/summarize new material, lesson or unit. 	Connect: How is the artwork, the ideas, or information presented CONNECTED to what you already knew? Extend: What new ideas did you get that EXTENDED or pushed your thinking in new directions? Challenge: What is still CHALLENGING or confusing for you to get your mind around? What questions, wonderings or puzzles do you now have?
	CREATIVE COMPARISONS	 Use metaphorical thinking to create comparisons between dissimilar things. Understand unfamiliar subjects by linking it to what they already know Stimulate new insights and solutions 	 What do you see in the artwork? What do you know about the topic? Choose a category (musical instruments, plants, video game, toy city, part of the body, etc.) Imagine: If this topic/artwork was a kind of (provide category), what would it be? Explain three ways that it compares.

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COMPARING & CONNECTING	HEADLINES This routine helps students identify and clarify big ideas.	Summarize lesson, unit.Draw conclusions.Clarify their thinking.	 If you were to write a headline for this topic or issue right now that captured the most important aspect that should be remembered, what would that headline be? (Later) How has your headline changed based on today's discussion? How does it differ from what you would have said yesterday?
FINDING COMPLEXITY	PARTS/PURPOSES/COMPLEXITIES	Identify components, purpose and relationships. Seeing the layers and dimensions of things.	Ask 3 questions: 1. What are its parts? (What are the pieces or components?) 2. What are its purposes? (What is it for, what does it do?) 3. What are its complexities? (How is it complicated in its parts, purposes, the relationships between the two or other ways?)
	COMPLEXITY SCALE	 Build a more multi-dimensional mental model of a topic by identifying different aspects of the topic and considering their complexity. Encourage the reasoning required for students to choose and explain their ratings. Of less is importance is assigning each idea to the "right" place on the complexity scale. 	 Say some broad things you know about a topic -observations, facts, ideas. Think up different kinds of things. Place each statement somewhere on the complexity scale (Simple> Complex) Explain why you want to place it there. Reflect: What new insights and questions do you have about the topic? *Feel free to discuss and debate placement. You can even place a statement in more than one spot on the line (sometimes things are simple in one way, but complex in another).
EXPLORING VIEWPOINTS	STEP INSIDE (PERCEIVE/KNOW/CARE ABOUT) CIRCLE OF VIEWPOINTS	 Do some perspective-taking and close looking through projection, a technique in which students project a persona into a person or thing in order to explore ideas from a new viewpoint. See beyond the surface story and explore different viewpoints. Help students bring abstract concepts, pictures, or events to life. Make a personal connection to a topic. See and explore multiple perspectives. 	Choose a person, object or element in an image or work of art, and step inside that point of view. Consider: • What can the person/thing perceive and feel? • What might the person/thing know about or believe? • What might the person/thing care about? Take on the character of the thing you've chosen and improvise a monologue. Speaking in the first person, talk about who/what you are and what you are experiencing. 1. Brainstorm a list of different perspectives.
	CIRCLE OF VIEWFORVIO	 Understand that different people can have different kinds of connections to the same thing, and that these different connections influence what people see and think. See other perspectives or when things seem like there are only two sides to an issue. Discuss dilemmas and other controversial issues. 	 2. Choose one perspective to explore, using these sentence-starters: I am thinking of(the topic) from the viewpoint of(the viewpoint you've chosen). I think(describe the topic from your viewpoint. Be an actortake on the character of your viewpoint). A question I have from this viewpoint is(ask a question from this viewpoint).