K-2nd Grade-Steps in the Critical Thinking Skills

Adapted from Dimensions of Learning (1992) and Classroom Instruction that works (2001)

Identify Similarities and Differences	 Comparing: describing how things are the same and different 1. What do I want to compare? 2. What is it about them that I want to compare? 3. How are they the same? How are they different? 	 Classifying: grouping things that are alike into categories What do I want to classify? What things are alike and could be put into a group? How are the things alike? What other groups can I make and how are the things alike in each group? Does everything now fit into a group? Would it be better to split up any of the groups or put groups together? 	 Creating a Metaphor: finding and explaining patterns in specific situations What is the important information? Can I find a pattern in the information and describe it? Can I find another example that uses the same pattern and show how it does? 	 Creating an Analogy: finding the relationships between two pairs of items How are the two items in the first pair related? Can I state the relationship in a simple way? Can I identify another pair of items that share a similar relationship? 	
Use Analysis Techniques	 Analyzing Perspectives: describing different points of view What is one point of view? What are the reasons for this point of view? What is another point of view? What might be some reasons for this other point of view? 	 Creating an Argument: providing support for a claim What did I notice that needs to be supported with more information? Make a statement about it. What examples and information can I share to support my statement? What information can I share that explains when my statement does not apply? 	 Finding Fallacy: finding and describing errors in thinking 1. What is it that someone is trying to get me to believe? 2. What is the unusual claim that is keeping me for believing them? 3. How can I explain why I think the claim is false? 	 Systems Analysis: viewing something as a system What are the parts of the system? How do the parts affect each other? What would happen if various parts stopped or changed their behavior? 	
Generate and Test Hypotheses	 Decision Making: using characteristics to select from choices that seem equal 1. What am I trying to decide? 2. What are my choices? 3. What are the important criteria for making this decision? 4. How important is each criterion? 5. Which choice best match my criteria? 6. How do I feel about the decision? Do I need to change any criteria and try again? 	 Problem Solving: overcoming barriers in the way of reaching a goal What am I trying to accomplish? What are the limits or barriers that are in the way? What are some solutions for overcoming the limits or barriers? Which solution will I try? How well did it work? Should I try another solution? 	 Investigation: finding and defending ways to clear up confusion or define a topic such as an event or a concept What event or idea to I want to explain? What do people already know? What confusions do people have about the idea or event? What suggestions do I have for clearing up these confusions? How can I defend my suggestions? 	 Invention: developing a product or process to meet a need What do I want to make, or what do I want to make better? What standards do I want to set for my invention? What is the best way to make a rough draft of my invention? How can I improve on my rough draft? Does my invention meet the standards I have set? 	 Experimental Inquiry: testing and explaining what we observe What do I see or notice? How can I explain it? Based on my explanation, what can I predict? How can I test my prediction? What happened? Is it what I predicted? Do I need to try a different explanation?