Mathematics

Problem solving instruction: explicit instruction in the steps to solving a mathematical or science problem including understanding the question, identifying relevant and irrelevant information, choosing a plan to solve the problem, solving it, and checking answers.

Student developed glossary: Students keep track of key content and concept words and define them in a log or series of worksheets that they keep with their text to refer to.

Think-alouds: using explicit explanations of the steps of problem solving through teacher modeling metacognitive thought. Ex: Reading a story aloud and stopping at points to think aloud about reading strategies/processes or, in math, demonstrating the thought process used in problem solving.

Reading

Chunking and questioning aloud: The process of reading a story aloud to a group of students and stopping after certain blocks of text to ask the students specific questions about their comprehension of the story and some key features of the text.

Graphic organizers: visual displays to organize information into things like trees, flowcharts, webs, etc. They help students to consolidate information into meaningful whole and they are used to improve comprehension of stories, organization of writing, and understanding of difficult concepts in word problems.

Reciprocal teaching: an instructional method that involves guided practice of reading comprehension that follows the four concrete steps of: 1) clarification, 2) questioning, 3) summary, and 4) prediction.