

READI Learning Goals for Text-Based Science Inquiry

- 1. Engage in close reading of science information to construct domain knowledge, including multiple representations characteristic of the discipline and language learning strategies. Close reading encompasses metacomprehension and self-regulation of the process.
- 2. Synthesize science information from multiple text sources.
- 3. Construct explanations of science phenomena (explanatory models) using science principles, frameworks, enduring understandings, crosscutting concepts, and scientific evidence.
- 4. Justify explanations using science principles, frameworks and enduring understandings, cross-cutting concepts, and scientific evidence. (Includes evaluating the quality of the evidence.)
- 5. Critique explanations using science principles, frameworks and enduring understandings, cross-cutting concepts, and scientific evidence.
- 6. Demonstrate understanding of epistemology of science through inquiry dispositions and conceptual change awareness/orientation (intentionally building and refining key concepts through multiple encounters with text); seeing science as a means to solve problems and address authentic questions about scientific problems, tolerating ambiguity and seeking "best understandings given the evidence," considering significance, relevance, magnitude and feasibility of inquiry.