

SCIENCE STRATEGIES

Scientific Reading	Thinking Strategies
Activating and Building Background Knowledge	<ul style="list-style-type: none"> • What do I already know about this topic? • How does what I already know connect to this new topic? • How is this analogous to something I am familiar with?
Inferring to Draw Conclusions	<ul style="list-style-type: none"> • What is my hypothesis and how will I go about confirming/disconfirming it? • What do I see? • What do I think what I see means?
Asking Questions	<ul style="list-style-type: none"> • What do I need to find out first? • What am I wondering? • How does this process work? • Where can I go to learn more? • How is what I've learned like what I know? • What about diagrams, data, and pictures is confusing?
Monitoring Comprehension	<ul style="list-style-type: none"> • Where am I confused? What can I do to clear up my confusion? • What are the diagrams, data, and pictures telling me? • Can I paraphrase what I just read? • How does this new information fit my existing background knowledge? • What topic specific vocabulary do I need to know? • What are other ways I can solve this problem?
Rereading to Repair Meaning	<ul style="list-style-type: none"> • How can I reread this section of text differently? • What question can I ask to isolate my confusion? • Are my calculations accurate? • How does what I read connect to the lab work, and the notes I've taken in class? • How would I visually represent this concept?
Determining Importance	<ul style="list-style-type: none"> • What text features are bolded or accentuated that help me know what the author thinks is important? • What do the diagrams and pictures tell me about the processes, datum, formulas, and cycles I am studying? • What is the big idea of the section I just read? • What information from the text do I need to continue?
Synthesizing and Extending Thinking	<ul style="list-style-type: none"> • How has my thinking about this topic evolved? • What new hypothesis do I have? • How will I hold my thinking so that I can remember and reuse it?

Adaptations made from Proficient Reader Model

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