## SCIENCE STRATEGIES

<table>
<thead>
<tr>
<th>Scientific Reading</th>
<th>Thinking Strategies</th>
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</table>
| Activating and Building Background Knowledge | • 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 | • 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 | • 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 | • 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 | • 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 | • What text features are emboldened 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 | • 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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