

## Workshop Model for Secondary Science <sup>SEPs</sup> (see superscripts)

<p><b>Mini-Lesson</b></p> <p>10-20min</p>	<p><b>Teacher introduces the day’s topic with a question.</b>  <b>The question should be relevant, thought-provoking, and open-ended.</b>  <b>The question should be related to the student’s prior learning.</b></p> <p>*Students may be required to write the question and some of the responses.          *Questions need not be so open-ended that no conclusion is reached. This period of time should result in student learning.</p> <p><i>Possibilities include:</i></p> <ul style="list-style-type: none"> <li>-Questions may evoke scientific argumentation.<sup>7</sup></li> <li>-Questions may require a calculation.<sup>5</sup></li> <li>-Questions may require a quick online search.<sup>8</sup></li> <li>-Questions may lead to further questions.<sup>1</sup></li> </ul>
<p><b>Independent Work</b></p> <p>MS: 10-20min          HS: 20-30min</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p><i>Independent and Small Group segments may be interchanged, but both should be completed.</i></p> </div>	<p><b>Students are assigned a task to work on alone. During this time the teacher moves about the room to assist students, as needed.</b></p> <p><i>Possible tasks include:</i></p> <ul style="list-style-type: none"> <li>-Read and answer questions from the textbook or other source. <sup>1, 4, 7, 8</sup></li> <li>-Draw and label a diagram of related content. <sup>2</sup></li> <li>-Study a given chart or graph and write a list of observations, conclusions, or questions.<sup>4</sup></li> <li>-Read a passage, write conclusions.<sup>8</sup></li> <li>-Read the summary of a scientific investigation, write conclusions.<sup>3</sup></li> <li>-Write the plans for a scientific investigation on a given topic.<sup>3</sup></li> <li>-Read about a phenomena. Offer an explanation and support for the explanation.<sup>6</sup></li> <li>-Work on practice problems.<sup>5</sup></li> <li>-Watch a video, take notes, answer questions. <sup>6, 7, 8</sup></li> </ul>
<p><b>Small Group Work</b></p> <p>MS: 10-20min          HS: 20-30min</p>	<p><b>Students, in groups of no more than 4, are given actual materials to study a given topic.</b></p> <p><i>Possible tasks include:</i></p> <ul style="list-style-type: none"> <li>-Measurement (direct or derived). <sup>5</sup></li> <li>-Construct a device to certain specs.<sup>9</sup></li> <li>-Perform a task, collect and arrange data. <sup>4, 5</sup></li> <li>-Solve a real problem. <sup>9</sup></li> <li>-Plan an investigation for the next day. <sup>3</sup></li> <li>-Conduct an investigation. <sup>3</sup></li> </ul> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;"> <p><i>On some days, this time may be extended for a full lab experiment, or to check the results of an experiment that was begun the previous day. On other days, a mini-lab may be performed.</i></p> </div>
<p><b>Sharing</b></p> <p>5-10min</p>	<p><b>Teacher guides the whole class to share what they learned based on mini-lesson discussion, independent work, and small group work. Teacher clears up any misconceptions from the day.</b></p> <p><i>Possible tasks include:</i></p> <ul style="list-style-type: none"> <li>-Teacher calls on a 3-4 individuals to share out. <sup>1, 8</sup></li> <li>-Teacher calls on 1-2 groups to share out. <sup>1, 8</sup></li> <li>-Teacher asks guiding questions to help students shape final conclusions. <sup>1, 8</sup></li> </ul>

-Reader's Workshop.org. (n.d.). Retrieved January 2, 2018, from <http://www.readersworkshop.org/>

-Says, M., Says, C. C., & Says, M. K. (2016, March 22). Launching Your Math Workshop. Retrieved January 2, 2018, from <https://www.the curriculumcorner.com/the curriculumcorner123/2015/08/launching-your-math-workshop/>

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