### Example Activities for Learning the Scientific Process in Remote Settings

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<th>Scientific Process</th>
<th>Example Activities</th>
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| **Hypothesis Generation**                | - Write a literature review and identify a gap in the literature. Write a hypothesis or research question to address the gap.  
- Create a series of structured reading assignments for students to connect concepts from lecture to the primary literature.  
- Ask students to make predictions and then watch a video of an experiment. |
| **Experimental Methods**                 | - Share a video or simulation of the experimental procedure. Ask students to develop or annotate a lab protocol accompanied by reflection on use of the protocol or limitations.  
- Ask students to explain the reasons behind specific steps in a protocol to understand why specific procedures are performed.  
- Pose a hypothesis and ask students to identify experimental methods that could be used to gather evidence for the hypothesis.  
- Randomize the steps of a protocol and ask students to put into the correct logical order. |
| **Data Analysis**                        | - Provide students with data in the format as if they collected it themselves.  
- Ask students to analyze a sample dataset and write a lab report. |
| **Conclusion Making and Communication**  | - Ask students to summarize and synthesize their analysis of the literature or of sample data sets through digital posters, presentations, blog posts, etc. |