

## ***Rocks and Minerals: Goals and Assessment Strategies***

<b>Concepts</b>	
<b>Goals</b>	<b>Assessment Strategies</b>
Rocks are aggregates of minerals, and they may also contain organic matter. Lessons 1–4, 16–17	Lessons 1, 5, 16–17 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Notebooks</li> <li>▪ Brainstorming charts</li> <li>▪ Record sheets</li> <li>▪ Oral reports</li> <li>▪ Venn diagram</li> </ul>
Different rocks have different properties. Lessons 1–4, 16–17	Lessons 1, 4, 16–17 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Notebooks</li> <li>▪ Record sheets</li> <li>▪ Class discussions</li> </ul>
The properties of rocks reflect the way they were formed and the minerals in them. Lessons 3–4, 16	Lessons 4–5, 16 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Notebooks</li> <li>▪ Class discussions</li> <li>▪ Oral reports</li> </ul>
Each mineral is composed of only one substance, and that substance is the same in all samples of the mineral. Lessons 5–15	Lessons 5, 13, 15 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Notebooks</li> <li>▪ Mineral profile sheets</li> <li>▪ Individual and class discussions</li> <li>▪ Oral and written reports</li> <li>▪ Venn diagram</li> </ul>
Minerals differ in color, texture, smell, luster, transparency, hardness, shape, and reaction to magnets. Lessons 6–15	Lessons 5–6, 13, 15 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Mineral profile sheets</li> <li>▪ Notebooks</li> <li>▪ Individual and class discussions</li> </ul>
The properties of rocks and minerals determine how they are used. Lessons 7–16	Lesson 16 <ul style="list-style-type: none"> <li>▪ Oral and written reports</li> </ul>

<b>Skills</b>	
<b>Goals</b>	<b>Assessment Strategies</b>
Using senses to observe and describe rocks and minerals. Lessons 1–17	Lessons 1, 4, 6, 13, 17 <ul style="list-style-type: none"> <li>▪ Record sheets</li> <li>▪ Mineral profile sheets</li> <li>▪ Individual and class discussions</li> <li>▪ Venn diagram</li> </ul>
Recording and discussing observations of rocks and minerals. Lessons 1–17	Lessons 1, 4–6, 13, 15, 17 <ul style="list-style-type: none"> <li>▪ Notebooks</li> <li>▪ Record sheets</li> <li>▪ Mineral profile sheets</li> <li>▪ Individual and class discussions</li> </ul>

<b>Goals</b>	<b>Assessment Strategies</b>
Sorting minerals on the basis of similarities and differences in identified properties. Lessons 6–14	Lessons 6, 13 <ul style="list-style-type: none"> <li>▪ Teacher’s observations</li> <li>▪ Mineral profile sheets</li> <li>▪ Notebooks</li> <li>▪ Class discussions</li> </ul>
Performing and interpreting results of the following tests on minerals: streak, transparency, luster, hardness, and magnetism. Lessons 7–15	Lessons 6, 13, 15 <ul style="list-style-type: none"> <li>▪ Teacher’s observations</li> <li>▪ Mineral profile sheets</li> <li>▪ Individual and small-group discussions</li> </ul>
Recording and discussing results of tests on minerals. Lessons 7–15	Lessons 6, 13, 15 <ul style="list-style-type: none"> <li>▪ Mineral profile sheets</li> <li>▪ Individual and small-group discussions</li> </ul>
Reading for more information on minerals and rocks. Lessons 3, 5–16	Lessons 6, 13, 16 <ul style="list-style-type: none"> <li>▪ Oral and written reports</li> <li>▪ Notebooks</li> <li>▪ Class discussions</li> </ul>
Communicating observations and test results through writing and discussion. Lessons 1–17	Lessons 1, 4, 6, 13, 15, 17 <ul style="list-style-type: none"> <li>▪ Notebooks</li> <li>▪ Record sheets</li> <li>▪ Mineral profile sheets</li> <li>▪ Small-group and class discussions</li> </ul>
Reflecting on experiences through writing and discussion. Lessons 2–16	Lessons 6, 13, 15–16 <ul style="list-style-type: none"> <li>▪ Notebooks</li> <li>▪ Class discussions</li> <li>▪ Oral and written reports</li> </ul>
Applying previously learned concepts and skills to solve a problem. Lessons 13–14	Lessons 13, 15 <ul style="list-style-type: none"> <li>▪ Teacher’s observations</li> <li>▪ Notebooks</li> <li>▪ Small-group discussions</li> </ul>

<b>Attitudes</b>	
<b>Goals</b>	<b>Assessment Strategies</b>
Developing an interest in investigating rocks and minerals. Lessons 1–17	Lessons 1, 16–17 <ul style="list-style-type: none"> <li>▪ Pre- and post-unit assessments</li> <li>▪ Class discussions</li> <li>▪ Student self-assessment</li> </ul>
Recognizing the importance of using multiple tests to create a profile of a mineral. Lessons 9–16	Lessons 13–15 <ul style="list-style-type: none"> <li>▪ Notebooks</li> <li>▪ Class discussions</li> </ul>
Valuing scientific information that has been collected and verified over time. Lessons 13–16	Lessons 13, 15–16 <ul style="list-style-type: none"> <li>▪ Notebooks</li> <li>▪ Oral and written reports</li> <li>▪ Class discussions</li> </ul>