

Rocks and Minerals: Goals and Assessment Strategies

Concepts	
Goals	Assessment Strategies
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"> ▪ Pre- and post-unit assessments ▪ Notebooks ▪ Brainstorming charts ▪ Record sheets ▪ Oral reports ▪ Venn diagram
Different rocks have different properties. Lessons 1–4, 16–17	Lessons 1, 4, 16–17 <ul style="list-style-type: none"> ▪ Pre- and post-unit assessments ▪ Notebooks ▪ Record sheets ▪ Class discussions
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"> ▪ Pre- and post-unit assessments ▪ Notebooks ▪ Class discussions ▪ Oral reports
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"> ▪ Pre- and post-unit assessments ▪ Notebooks ▪ Mineral profile sheets ▪ Individual and class discussions ▪ Oral and written reports ▪ Venn diagram
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"> ▪ Pre- and post-unit assessments ▪ Mineral profile sheets ▪ Notebooks ▪ Individual and class discussions
The properties of rocks and minerals determine how they are used. Lessons 7–16	Lesson 16 <ul style="list-style-type: none"> ▪ Oral and written reports

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

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

Attitudes	
Goals	Assessment Strategies
Developing an interest in investigating rocks and minerals. Lessons 1–17	Lessons 1, 16–17 <ul style="list-style-type: none"> ▪ Pre- and post-unit assessments ▪ Class discussions ▪ Student self-assessment
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"> ▪ Notebooks ▪ Class discussions
Valuing scientific information that has been collected and verified over time. Lessons 13–16	Lessons 13, 15–16 <ul style="list-style-type: none"> ▪ Notebooks ▪ Oral and written reports ▪ Class discussions