



Teacher: Helen Krasnow & the 5th Grade Teachers at the Hewlett School

**Subject(s): Science
Grade 5 - 6**

Month: January

Unit: The Study of Rocks and Minerals

ESSENTIAL QUESTIONS	CONTENT	SKILLS	ASSESSMENTS	LESSONS
<ul style="list-style-type: none"> ▪ How are rocks and minerals different? ▪ Why do people collect rocks? ▪ Why are some rocks more valuable than others? 	<ul style="list-style-type: none"> ▪ Properties of rocks and Minerals ▪ Igneous, sedimentary, and metamorphic rocks ▪ Luster, hardness (Moh's Scale), streak, acid (mineral testing) ▪ Crystallization ▪ Geodes ▪ Lava, magma, volcanoes ▪ The rock cycle ▪ Iridescent rocks <p>READ ALOUDS <i>Earthsteps: A Rock's Journey Through Time</i> by Diane Spickert <i>Everybody Needs a Rock</i> by Baylor and Parnall <i>If You Find A Rock</i> by Peggy Christian <i>Moonstone</i> by Ivan Gantshev <i>A Pebble in My Pocket</i> by Hooper and Coady <i>Rocks in His Head</i> by R.F. Symes</p>	<ul style="list-style-type: none"> ▪ Observe and discuss properties of rocks and minerals ▪ Describe the differences between igneous, sedimentary, and metamorphic rocks ▪ Identify rock and mineral specimens using books and the internet ▪ Discuss and grow minerals ▪ Investigate models of rocks that they make ▪ Conduct experiments and record data from the following mineral tests: luster, hardness, streak, acid ▪ As a result of testing, name unknown rock and mineral specimens based on their properties ▪ Communicate, observe and collect data ▪ Make and use models ▪ Experiment, predict, classify ▪ Conduct experiments and write a lab report ▪ Read nonfiction for meaning and understanding ▪ Listen to and read fiction for meaning and understanding ▪ Discuss read alouds and their relationships to the unit of study ▪ Work collaboratively with others ▪ Observe safety rules in a laboratory setting 	<ul style="list-style-type: none"> ▪ Lab reports assessed by student and teacher rubrics ▪ Graphic organizer for lab reports ▪ Assess ability to hypothesize orally and in writing ▪ Assess ability to draw conclusions from experimentation ▪ Observations of small group activities and experiments with observer notes ▪ Guided class discussions with observer notes ▪ 3-2-1 Exit Cards: <i>3 things I learned today</i> <i>2 questions I have</i> <i>1 thing I want to learn more about</i> ▪ Student and teacher rubrics to assess collaboration with others ▪ Review of class notes taken ▪ Unit tests 	<p>Conduct the following experiments:</p> <ul style="list-style-type: none"> ▪ Rocks and Minerals Properties ▪ Making a Rock ▪ The Luster of Minerals ▪ The Hardness of Minerals ▪ The Streak Test ▪ The Acid Test ▪ Growing Crystals ▪ Investigating Geodes - Cracking geodes open ▪ Investigating Rock Models ▪ Identifying Rocks ▪ Looking at rocks under black lights