

Note: This document has not been localised for use in SA. The project plan may look slightly different as a result.

A P P E N D I X I

Assessment Resources

Assessment Plan Examples

Fraction Quest

Classroom Information
Subject Area
Math
Grade Level(s)
3-5
Higher-Order Thinking Skills
Problem Solving, Making Inferences, Generalizing
Key Learnings
Fractions, Problem Solving, Research Techniques
Unit Summary
Students are assigned to a profession that uses fractions on the job. They research, summarize, draw conclusions, and present their findings to the class answering questions such as, Does accuracy really matter that much? and How are fractions used on the job and are they needed to get the job done right? Students learn to add, subtract, multiply, and divide fractions to help answer the Unit Question, How can understanding fractions make your life easier? As a culminating activity, students reflect on the importance of knowing fractions in the assigned profession and in their own lives both now and in the future.
Building the Foundation
Standards
<i>California Mathematics Standards for Grade 5</i>
<ul style="list-style-type: none"> ▪ 2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions: <ul style="list-style-type: none"> ▪ 2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form. ▪ 2.4 Understand the concept of multiplication and division of fractions. ▪ 2.5 Compute and perform simple multiplication and division of fractions and apply these procedures to solving problems.
<i>National Educational Technology Standards</i>
<ul style="list-style-type: none"> ▪ Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works. ▪ Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. ▪ Students use technology to locate, evaluate, and collect information from a variety of sources.

Curriculum-Framing Questions	Essential Question	
	Does accuracy really matter that much?	
	Unit Questions	
	How are fractions used on the job? How can understanding fractions make your life easier?	
	Content Questions	
	What is a fraction? How do you add, subtract, multiply, and divide fractions? What is a numerator? What is a denominator?	
Student Assessment		
Assessment Summary		
<p>Students answer prompts in their math journals related to the Unit Questions and the fraction activities. Students use the checklist to self-assess their poster and monitor their collaboration skills as they work together on the poster. Students use a project rubric to help guide them through the entire project. Students use a checklist and storyboard to help them through the researching, drafting, and writing phases of the presentation. The teacher uses the checklist to assess content integration and the overall effectiveness of the presentation. Teachers schedule individual conferences to assess the students' mathematical understanding, critical thinking, collaboration, and the research process. Students use the storyboard to plan and monitor work on the presentation. Teachers use the journal, checklists, storyboard, conference notes, and reflections to assess conceptual understanding using the project rubric as a guide. Teachers use questioning strategies to monitor student progress, probe for understanding, and engage students in higher-order thinking. Teachers also return to Curriculum-Framing Questions throughout the project to analyze student understanding. Students reflect on their learning by relating how knowing fractions helps them now and in the future. Teachers review final reflections to assess student growth in understanding.</p>		
Assessment Timeline		
Before Project Work Begins	While Students Work on Projects	After Project Work Ends
Journal Collaboration Checklist Poster Checklist	Project Rubric Presentation Checklist Research Checklist Conferences Questioning	Presentation Checklist Project Rubric Chart Reflection
Credits		
David Frankle participated in the Intel® Teach to the Future program, which resulted in this idea for a classroom project. It has been modified and shortened for this appendix.		

Storm Watch

Classroom Information
Subject Area
Science, Math, Language Arts
Grade Level(s)
4-6
Higher-Order Thinking Skills
Cause and Effect, Analysis
Key Learnings
Measurement, Weather Changes, Patterns, Public Speaking
Unit Summary
<p>This unit helps students understand the many factors that determine what the weather is like in a particular location, such as the angle of the sun's light rays, the tilt of the Earth's axis, and the proximity to water, winds, and elevation. Students conduct many scientific investigations to understand the complexities of weather systems. Throughout the unit, students are asked to ponder the Essential and Unit Questions, <i>How do people respond to change?</i> and, <i>How does weather affect our lives?</i> In a final presentation, students take on the role of weather forecasters and report on weather conditions in a city they would like to visit. They demonstrate their understanding about the factors contributing to weather that people throughout the world experience each day.</p>
Building the Foundation
Standards
<p>Colorado English Standards for Grade 5-8</p> <ul style="list-style-type: none"> ▪ write and speak for a variety of purposes such as conveying technical information, explaining concepts and procedures, and persuading; ▪ organize written and oral presentations using strategies such as lists, outlining, cause/effect relationships, comparison/contrast, problem/solution, and narration; ▪ select relevant material for speaking purposes; ▪ understand the structure, organization, and use of various media, reference, and technological sources as they select information for their reading and writing; ▪ paraphrase, summarize, organize, and synthesize information; ▪ give credit for others' ideas, images, or information; and ▪ use information to produce a quality product. <p>Colorado Science Inquiry for Grade 5-8</p> <ul style="list-style-type: none"> ▪ ask questions and state hypotheses that lead to scientific investigations; ▪ make predictions based on prior experiences and understandings; ▪ use appropriate tools, technologies, and metric measurement units to gather and organize data; ▪ summarize data and communicate results of investigations in a variety of ways, including written reports, graphs, charts, data tables, and oral presentations; and ▪ work as a group to solve a problem.

Building the Foundation (Continued)	
Standards (Continued)	
<i>Colorado Standards - Earth's systems and the dynamics of the solar system and the universe for Grade 5-8</i>	
<ul style="list-style-type: none"> ▪ describe the atmosphere; ▪ observe changes in weather conditions; ▪ describe weather systems; ▪ explain how the sun affects atmospheric circulation; and ▪ investigate the occurrence of storms and explain their effects on human populations and the environment. 	
<i>Colorado Mathematics Standards for Grade 5-8</i>	
<ul style="list-style-type: none"> ▪ read, construct, compare, and contrast displays of data using appropriate techniques and technology; and ▪ gather data, formulate hypotheses, draw conclusions, and make convincing arguments based on data analysis. 	
<i>National Educational Technology Standards</i>	
<ul style="list-style-type: none"> ▪ Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works. ▪ Students use technology to locate, evaluate, and collect information from a variety of sources. 	
Curriculum-Framing Questions	Essential Question
	How do people respond to change?
	Unit Questions
	How does weather affect our lives?
	Content Questions
<ul style="list-style-type: none"> What are the reasons for the seasons? What are weather systems? What causes change in our weather? How does air pressure affect our weather? 	
Student Assessment	
Assessment Summary	
<p>Students create a T-Chart to compare and contrast fact from fiction in a story. The teacher uses it as a pre-assessment to determine readiness for studying weather. Students return to these throughout the unit to add additional questions and new learnings. Students make observations and keep notes in their science journal as they investigate weather systems. The teacher reviews during conferences to provide feedback, clarify misunderstandings and provide additional lessons if necessary. Students use a rubric to help them complete a line graph with data from their investigations. Students use a checklist to guide them through the research process. Teachers ask students to bring the checklist to conferences to monitor progress and allow students to ask questions. Students use a rubric to ensure they've met the expectations as they research a weather system and present their findings. Peers use the rubric to provide</p>	

Student Assessment (Continued)		
Assessment Summary (Continued)		
<p>feedback to the presenters. Students rank the steps to take in a severe weather system. The teacher probes student understanding and reasoning through questioning, reviewing comments, and providing feedback. Students complete a test at the end of the unit; the teacher uses the test results to assess student’s science content knowledge.</p>		
Assessment Timeline		
Before Project Work Begins	While Students Work on Projects	After Project Work Ends
<p>T-Chart K-W-L Chart Science Journal</p>	<p>Science Journal Conferences Line Graph Rubric Research Checklist Multimedia Rubric Peer Feedback Visual Ranking Comments Group Process Rubric Oral Presentation Rubric K-W-L Chart</p>	<p>K-W-L Chart Science Journal Oral Presentation Rubric Reflections District Test</p>
Credits		
<p>Jeanne Shirley participated in the Intel® Teach to the Future program, which resulted in this idea for an assessment plan. It has been modified and shortened for use in this appendix.</p>		

Great Thinkers

Classroom Information	
Subject Area	
Social Studies, Language Arts	
Grade Level(s)	
6–8	
Higher-Order Thinking Skills	
Analysis, Synthesis	
Key Learnings	
Researching, Expository Writing, Public Speaking	
Unit Summary	
<p>This unit exposes students to great minds who have made a significant impact on the world. Students take on the role of a Great Thinker and through research they analyze how these “Great Thinkers” changed the world. After synthesizing their research information, students create “I AM” poems as well as diary entries from the perspective of their Great Thinker. As a culminating activity, students become their Great Thinker, presenting the life and accomplishments of a Great Thinker to the class. In a final reflection, students answer the Essential and Unit Questions, <i>What does it take to change our world?</i> and <i>Which people have positively impacted our world?</i></p>	
Building the Foundation	
Standards	
Washington State Standards Reading	
<ul style="list-style-type: none"> The student understands the meaning of what is read. 	
Writing	
<ul style="list-style-type: none"> The student writes in a variety of forms for different audiences and purposes. The student understands and uses the steps of the writing process. 	
Communication	
<ul style="list-style-type: none"> The student communicates ideas clearly and effectively. 	
Social Studies	
<ul style="list-style-type: none"> Understand and use inquiry and information skills required by citizens in a democratic society Understand and apply critical thinking and problem solving skills to make informed and reasoned decisions 	
Curriculum-Framing Questions	Essential Question
	What does it take to change our world?
	Unit Questions
	Which people have positively impacted our world?
	Content Questions
<p>How did these “Great Thinkers” change the world?</p> <p>Who did their work impact?</p> <p>What obstacles did they overcome to change the world?</p>	

Student Assessment		
Assessment Summary		
<p>Students develop classroom and individual Know-Wonder-Learn Charts about Great Thinkers. The teacher uses the K-W-L initially to gauge readiness and interest in the topic and then during the unit to promote metacognitive skills as students revisit the charts and reflect on their learning. Students use journals to write down research notes and to answer reflective questions. The teacher reviews journals during conferences to provide feedback, clarify misunderstandings, and provide additional lessons if necessary. The teacher reviews journals at the end of the unit to assess analysis and synthesis skills. Students are given a short answer research quiz to check on their progress. Notes from observations and interactions with individuals and groups and from the conferences provide documentation for final assessment. Students use the poem scoring guide to monitor the quality of their work and to provide peer feedback during the writing, editing, and revising of the “I AM” poems. The teacher uses it to assess the final poems. Students write and deliver a speech as their Great Thinker, using the Speech Content Scoring Guide to help prepare for the content of the speech as well as to clarify questions during the practice sessions. Students reflect upon what they have learned in the unit, returning to the Essential and Unit Questions, “What does it take to change our world?”, and “Which people have positively impacted our world?” Students cite evidence from their research and their peers’ presentations. The teacher uses these reflections to assess students’ growth throughout the unit.</p>		
Assessment Timeline		
Before Project Work Begins	While Students Work on Projects	After Project Work Ends
Journal Questioning	Research Quiz Journal Questioning K-W-L Chart Anecdotal Notes Poem Scoring Guide Peer Feedback Diary Scoring Guide Oral Content Scoring Guide Oral Presentation Scoring Guide	K-W-L Chart Questioning Oral Content Scoring Guide Oral Presentation Scoring Guide Reflection
Credits		
<p>Joel Lang participated in the Intel® Teach to the Future program, which resulted in this idea for an assessment plan. It has been modified and shortened for use in this appendix.</p>		

World War I: The War to End All Wars?

Classroom Information
Subject Area
American History
Grade Level(s)
11
Higher-Order Thinking Skills
Cause-and-Effect, Decision-Making, Analysis
Key Learnings
Main Causes of World War I, Trench Warfare, US Entry into WWI, Propaganda, Treaty of Versailles
Unit Summary
High school history students begin a journey to discover the answer to the Unit Question: Could this “war to end all wars” have been prevented? by investigating the causes of World War I. They create a newspaper that answers the questions about the causes of WWI. The students then use the Visual Ranking Tool to rank which of the causes was the most influential in the start of the war and defend their position. After a class discussion on the causes of the War, students complete a map of Europe prior to the outbreak of the War using a paint program to label countries and color code them according to which side they were on. Students use information from primary sources written by WWI soldiers. Then they participate in a simulated trench warfare activity. Based on this experience, they write journal entries or letters to a family member as if they were soldiers in the trenches. Students then examine the objectives and tools of propaganda and do research on WWI propaganda from several different countries to study the impact that propaganda had on the home front. Students conclude this unit by creating a multimedia presentation analyzing how propaganda was used in different countries. Students use rubrics and checklists to plan and monitor their work. As a concluding activity, students compare the propaganda of World War I to the present day and discuss how propaganda has an influence on their lives today. To culminate this unit, students complete an essay test about World War I.
Building the Foundation
Standards
<i>Kansas History Benchmark 1</i>
The student uses a working knowledge and understanding of individuals, groups, ideas, developments, and turning points in the era of the emergence of the modern United States (1890 - 1930).
<ol style="list-style-type: none"> 1. Analyzes the reasons for and impact of the United States' entrance into World War I. 2. Analyzes how the home front was influenced by United States involvement in World War.

Curriculum-Framing Questions	Essential Question	
	Why is there conflict?	
	Unit Questions	
	Could the “war to end all wars” have been prevented? Is propaganda necessary?	
	Content Questions	
What are the four M.A.I.N causes of World War I? What is propaganda?		
Student Assessment		
Assessment Summary		
<p>Students write in their journals throughout the unit to explore various WWI topics. The information from these journal entries is used to provide individual and group feedback as students work on their projects. Students color-code maps of the world identifying which countries participated in WWI and which side they were on. Students use a checklist to monitor their progress while conducting research and creating their newspapers and use a rubric to make sure their work is high quality. The rubrics are also used to assess the final product. After creating the WWI newsletter with their groups, students use their Collaboration Self-Assessment Checklist to reflect on how well they worked with others. Students use a rubric to organize their thoughts on the final essay question and to plan what they are going to write. It is also used to assess the final essay. In this end-of-unit reflection, students assess their own learning during the unit and set goals for future learning experiences. The teacher and students use this information to track learning throughout the year.</p>		
Assessment Timeline		
Before Project Work Begins	While Students Work on Projects	After Project Work Ends
Brainstorming Discussion Journals World Map	Newspaper Checklist and Rubric Map Anecdotal Observations Collaboration Self- and Peer- Assessment Checklist & Rubric Collaboration Reflection Revised Map Journal Decision-Making Checklist WWI Journal and Letters Rubric Discussion Propaganda Presentation Checklist and Rubric Propaganda Presentation Peer Feedback Informal Interviews	Project Rubrics Final Essay Test and Rubric Final Reflections
Credits		
Johanna Van Ness created the idea for this assessment plan. It has been modified and shortened for use in this appendix.		