



**Gasconade R-2**  
**Objective Course Curriculum Report for: SEEK 5 -**  
**Fifth Grade**

*Generated on 11/23/2015*

Name

SEEK 5 Objective 1

Unit Objective

Measurable Learner Objectives: At the end of this unit students will be able to:  
• Analyze and evaluate why people invent  
• Justify the importance of original thinking in invention  
• Compare and contrast various categories of inventions

• Create their own invention

• Evaluate the types of criticisms inventors face  
• Discover how to get an invention patented

Created By

System

Creation Date

5/19/2013 7:16:27 PM +00:00

Modified By

System

Modification Date

11/19/2013 3:21:01 PM +00:00

Sequence

1

Assessment Methods

Essential Questions

## Course

SEEK 5

## Unit

Unit Title: Invent Grades: 3-5 Duration: 4-6 weeks Unit Rational: Invent is an exciting simulation that helps turn students into inventors. Students gain insight into the creative processes associated with inventing as they research inventors and analyze how their inventions have enhanced our lives. Students then apply the creative process as they brainstorm, tinker, and ultimately create their own inventions. Once the inventions are created students learn about patenting, advertising, marketing, and defending their invention. The event then culminates in an activity day called, "Thomas Edison Day."

## Objective used to assess students

## Formative Assessment Activities

Assessments: Performance Task: Fairy tale group inventions Performance Task: Past/Present/Future Activity Performance Event: Tinkered Prototypes Performance Event: The Class Book of Inventions Performance Event: The Invention Log Book

## Depth of Knowledge

Students will complete tasks with 80% proficiency

## Learning Activity

Working as a group students will: • Explore the various categories of life requiring inventions • Evaluate the impact of specific inventors and their inventions • Brainstorm multiple solutions to the origins of specific inventions • Categorize the steps associated with the process of invention • Create a classroom invention book • Develop an invention wheel to keep track of their progress Working in small groups students will: • Problem solve to create an invention to help a fairy tale character • Present and critique each other's tinkered inventions • Compose a graph of the most important inventions in history • Cultivate an appreciation of the value of applying the thinking tools involved in invention Working individually students will: • Originate their own invention prototype from provided materials • Develop and maintain their own invention log • Create a survey to aid decisions made during the invention process

## Research-based Instructional Strategies

activate students' prior knowledge through the use of engaging strategies designed to focus learning provide a structure for learning that actively promotes the comprehension and retention of knowledge through the use of engaging strategies that acknowledge the brain's limitations of capacity and processing promote the retention of knowledge through the use of engaging strategies designed to rehearse and practice skills for the purpose of moving knowledge into long-term memory encourage students to learn to read, write, and think by having meaningful engagements with more experienced individuals - many times these individuals may be their peers

show the connection between effort and achievement

share stories about people who succeeded by not giving up "Pause, Prompt, Praise." If a student is struggling, pause to discuss the problem, then prompt with specific suggestions to help him/her improve

### Supporting Resources

Resources: Arner, B. (1994) Invent: A Simulation of Inventors and the Invention Process. Carlsbad, CA. Interaction Publishers Inc. Flack, J. (1989) Inventing, Inventions, and Inventors: A Teaching Resource Book. Englewood, CO. Teacher Ideas Press.

### Correction Exercise

### Enrichment Exercise for Accelerated Learners

### Remediation for Struggling Learners

### English Language Learner

### District Defined

### Objective is A+

### Missouri School Improvement Program

Code	Subject	Grade	G
MSIP Equity Concepts	Equity Concepts	Gender	T
MSIP Equity Concepts	Equity Concepts	Technology	RI
MSIP Equity Concepts	Equity Concepts	Research information seeking skills	W

Show-Me Standards

Code	Subject	Grade	Standard	Goal
1	Communication Arts	Grades: K-12	speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)	
3	Communication Arts	Grades: K-12	reading and evaluating nonfiction works and material (such as biographies, newspapers, technical manuals)	
4	Communication Arts	Grades: K-12	writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)	
6	Communication Arts	Grades: K-12	participating in formal and informal presentations and discussions of issues and ideas	
1	Fine Arts	Grades: K-12	process and techniques for the production, exhibition or performance of one or more of the visual or performed arts	
2	Mathematics	Grades: K-12	geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes	

1	Science	Grades: K-12	properties and principles of matter and energy	
2	Science	Grades: K-12	properties and principles of force and motion	
8	Science	Grades: K-12	impact of science, technology and human activity on resources and the environment	
4	Social Studies	Grades: K-12	economic concepts (including productivity and the market system) and principles (including the laws of supply and demand)	
7	Social Studies	Grades: K-12	the use of tools of social science inquiry (such as surveys, statistics, maps, documents)	
1.1	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Develop questions and ideas to initiate and refine research
1.2	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Conduct research to answer questions and evaluate information and ideas

2.1	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.	Plan and make written, oral and visual presentations for a variety of purposes and audiences
2.2	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.	Review and revise communications to improve accuracy and clarity
2.3	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.	Exchange information, questions and ideas while recognizing the perspectives of others
3.1	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.	Identify problems and define their scope and elements
3.2	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.	Develop and apply strategies based on ways others have prevented or solved problems
3.3	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.	Develop and apply strategies based on one's own experience in preventing or solving problems



1.4	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Use technological tools and other resources to locate, select and organize information
1.5	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Comprehend and evaluate written, visual and oral presentations and works
1.6	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Discover and evaluate patterns and relationships in information, ideas and structures
1.8	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.	Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation
2.7	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.	Use technological tools to exchange information and ideas

3.5	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.	Reason inductively from a set of specific facts and deductively from general premises
3.6	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.	Examine problems and proposed solutions from multiple perspectives
4.1	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society.	Explain reasoning and identify information used to support decisions
4.4	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society.	Recognize and practice honesty and integrity in academic work and in the workplace
4.6	Knowledge Standards	Grades: K-12	Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society.	Identify tasks that require a coordinated effort and work with others to complete those tasks

Grade and Course Level Standards

Common Core Standards

Version

1

Files

Date Range

Other Standards

Other Diverse Learners

Students Self-Reflection About Personal Goals

Use of Technology

Guiding Questions

Guiding Questions Depth of Knowledge

Summative Assessment Activities

Summative Correction Exercise

Family and Community Involvement