

**Overview**

In grades 3-4, students in the REACH program participate in activities designed to meet their unique academic and socioemotional needs. Students practice analyzing, synthesizing, generating original ideas, building their self-awareness, thinking flexibly, imagining, increasing their fluency, elaborating, problem solving and communicating. Independent projects allow students the opportunity to think creatively and express their learning through a variety of products.

The fourth grade REACH curriculum focuses attention on gaining an understanding of the multiple intelligences of people and how they can be used to solve problems. In the second unit, students learn about modes of communication that include codes and symbols, as well as enigmas that exist in the world around them. The third unit includes STEM-related skills to design a prototype of a feasible bridge that can withstand weight and natural forces. The fourth unit gives students the opportunity to do a self-directed project, practicing 21st century research and presentations skills through digital and collaborative learning experiences.

**Map**

Unit	Pacing	Essential Questions	Enduring Understandings	Content / Skills	Assessment	NJCCCS CPI / Common Core
Unit I  Multiple Intelligences - Visualization and Memory	9 weeks	How do I acquire new understandings and solve problems?  How can I improve the way I learn?	People learn and solve problems in different ways.  People can improve the ways they acquire new understandings and solve problems.	Key Terms:  Multiple intelligences  Demonstrating self-awareness  Researching	Statement describing intelligences strengths and weaknesses	CCSS.ELA-LITERACY.SL.4.4 - Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.  CCSS.ELA-LITERACY.RI.4.7 - Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.  CCSS.ELA-LITERACY.RI.4.9 - Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

<p>Unit II Codes and Symbols</p>	<p>14 weeks</p>	<p>How do people communicate?  How do people solve mysteries?</p>	<p>People communicate in many different ways.  Some mysteries are solvable and some remain unsolved.</p>	<p>Key Terms:  Solving problems  Analyzing  Synthesizing  Generating original ideas  Making decisions  Demonstrating self-awareness  Researching  Communicating</p>	<p>Final project related to codes, symbols and/or mysteries.</p>	<p>CCSS.ELA-LITERACY.RI.4.9 - Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</p>
<p>Unit III Bridges and Arches</p>	<p>4 weeks</p>	<p>How can I test my ideas?</p>	<p>Bridges are used to connect sides.  Bridges need to be strong, able to withstand forces, and be aesthetically pleasing.</p>	<p>Key Terms:  Collaborating in groups  Solving problems  Researching  Analyzing  Synthesizing  Thinking flexibly  Evaluating ideas  Making decisions  Communicating</p>	<p>Build and test a bridge that supports weight, and withstands forces (wind, shaking).</p>	<p>CCSS.ELA-LITERACY.SL.4.1 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others' ideas and expressing their own clearly.  8.2.5.A.5 - Identify how improvement in the understanding of materials science impacts technologies.  8.2.5.C.4 - Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.</p>

<p>Unit IV Passion Project</p>	<p>9 weeks</p>	<p>What do I know, and what do I want to know more about?</p>	<p>Learning is an ongoing and lifelong process.</p>	<p>Key Terms: Engage in self-directed learning Researching</p>	<p>Final project/ presentation  Reflection on self-directed learning project</p>	<p>CCSS.ELA-LITERACY.SL.4.4 - Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p> <p>CCSS.ELA-LITERACY.RI.4.9 - Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</p> <p>CCSS.ELA-LITERACY.SL.4.5 - Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</p> <p>9.2.4.A.3 - Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.</p> <p>9.2.4.A.4 - Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.</p>
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## **Bibliography**

### **Unit 1 – Multiple Intelligences, Visualization/ Memory**

Galbraith, Judy, and Pamela Espeland. *You Know Your Child Is Gifted When ... a Beginner's Guide to Life on the Bright Side*. Minneapolis, MN: Free Spirit, 2000.

### **Unit 2 – Codes and Symbols (Secret Messages, Chagall, Hour of Code)**

Janeczko, Paul B. *Top Secret: A Handbook of Codes, Ciphers, and Secret Writing*. Cambridge, MA: Candlewick, 2004.

Kimmel, Eric A., and Matthew Trueman. *A Picture for Marc*. New York: Random House, 2007.

Venezia, Mike. *Marc Chagall*. New York: Children's, 2000.

Welton, Jude. *Marc Chagall*. New York: Franklin Watts, 2003.

*Who Is The Artist? Painters of Fantasy Art - Chagall, Klee, Magritte*. Crystal Productions, 2005. DVD.

### **Unit 3 – Bridges and Arches - Working in Groups**

Wilson, Forrest. *Bridges Go from Here to There*. Washington, D.C.: Preservation, National Trust for Historic Preservation, 1993.

### **Unit 4 – Passion Project/Enigmas**

Various resources related to individual student research

## Webliography

### Unit 1

Multiple Intelligences, [www.bgfl.org/bgfl/custom/resources\\_ftp/client\\_ftp/ks3/ict/multiple\\_int/what.cfm](http://www.bgfl.org/bgfl/custom/resources_ftp/client_ftp/ks3/ict/multiple_int/what.cfm)  
Renzulli Learning Systems, [www.rezullilearning.com](http://www.rezullilearning.com)

### Unit 2

Brain Pop – Art Concepts, [www.brainpop.com/artsandmusic/artconcepts](http://www.brainpop.com/artsandmusic/artconcepts)  
Brain Pop – Cubism, [www.brainpop.com/artsandmusic/artconcepts/cubism](http://www.brainpop.com/artsandmusic/artconcepts/cubism)  
Brain Pop – Surrealism, [www.brainpop.com/artsandmusic/artconcepts/surrealism](http://www.brainpop.com/artsandmusic/artconcepts/surrealism)

### Unit 3

Brain Pop – Building Basics, [www.brainpop.com/technology/scienceandindustry/buildingbasics](http://www.brainpop.com/technology/scienceandindustry/buildingbasics)  
Brain Pop – Bridges, [www.brainpop.com/technology/scienceandindustry/bridges](http://www.brainpop.com/technology/scienceandindustry/bridges)  
Brain Pop – Engineering and Technology, [www.brainpop.com/technology](http://www.brainpop.com/technology)  
Hour of Code - [www.hourofcode.com/us](http://www.hourofcode.com/us)

### Unit 4

Brain Pop – Egyptian Pharaohs, [www.brainpop.com/socialstudies/worldhistory/egyptianpharaohs](http://www.brainpop.com/socialstudies/worldhistory/egyptianpharaohs)  
Brain Pop – Maya, [www.brainpop.com/socialstudies/worldhistory/mayacivilization](http://www.brainpop.com/socialstudies/worldhistory/mayacivilization)  
Brain Pop – Mummies, [www.brainpop.com/socialstudies/worldhistory/mummies](http://www.brainpop.com/socialstudies/worldhistory/mummies)  
Brain Pop – Seven Wonders of the Ancient World, [www.brainpop.com/socialstudies/worldhistory/sevenwonders](http://www.brainpop.com/socialstudies/worldhistory/sevenwonders)  
Renzulli Learning Systems, [www.rezullilearning.com](http://www.rezullilearning.com)

### All Units

Brain Pop – Imagination, [www.brainpop.com/artsandmusic/artconcepts/imagination](http://www.brainpop.com/artsandmusic/artconcepts/imagination)