# Teaching with <br> SAS ${ }^{\circ}$ Curriculum Pathways ${ }^{\circ}$ 

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## Teaching with SAS ${ }^{\circledR}$ Curriculum Pathways ${ }^{\circledR}$ Professional Development Manual

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SAS Curriculum Pathways

## User Names and Password Form

Once you subscribe and set up your individual user name and password, log in as follows:

| LOGIN: | Go to www.sascurriculumpathways.com. |
| :--- | :--- |
| Your Teacher User Name: |  |
| Your Teacher Password: |  |
| Student User Name: |  |

## Exploring SAS Curriculum Pathways English Language Arts

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As an English language arts teacher in a small school, you teach several grade levels. With so many preps, you are constantly scrambling to find new resources to use with your students. For which English language arts categories does SAS Curriculum Pathways provide resources?
Hint: Click English Language Arts under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources related to William Shakespeare. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use? Hint: Search for William Shakespeare. Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource for Lord of the Flies. List the title and Quick Launch (QL) number of the resource you could use.
Hint: Use Search.
4. Searching for a SAS Curriculum Pathways resource that will help your high school students learn how to read different types of nonfiction, you find Strategies for Reading Nonfiction. What type of resource have you found, what plug-in(s) does it require, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. As a writing teacher, you want to help your middle school students learn to develop and support arguments. Your search results provide a resource titled Clear Thinking: Looking for Evidence. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. Your high school students are working on a research project, and you want them to understand the proper citation of sources. Searching SAS Curriculum Pathways, you find a resource called Avoiding Plagiarism. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You've noticed that many of your middle school students have trouble producing complete, well-constructed sentences. Searching SAS Curriculum Pathways, you find the resource Frederick Douglass Shows How to Avoid Fragments and Run-ons. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students punctuate sentences correctly. List the title and Quick Launch number of the resource you could use.
Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for English language arts, which your students can address through the use of Writing Reviser, QL \#4003?
Hint: Enter 4003 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed Misused Expressions and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for "misused expression." In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. You plan to have your students complete the Reading for Information lesson as part of your unit on reading strategies. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 533 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Grammar Skills category, you find a resource you like called Affect or Effect. How can you bookmark this specific resource so that you can find it easily in the future?
Hint: Browse Resources in English Language Arts $\rightarrow$ Grammar Skills. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways Mathematics

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As the only math teacher in a small high school, you teach all the math classes. With so many preps, you are constantly scrambling to find new resources to use with your students. For which mathematics categories does SAS Curriculum Pathways provide resources?
Hint: Click Mathematics under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources that address factoring. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use?
Hint: Search for factoring. Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource for asymptotes of hyperbolas. List the title and Quick Launch number of the resource you could use. Hint: Use Search.
4. Searching for a SAS Curriculum Pathways resource that will allow your middle school students to practice transforming geometric figures in the coordinate plane, you find Graphing Translations. What type of resource have you found, what plug-in(s) does it require, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. Your middle school students can often use formulas to solve problems, but sometimes they don't understand why a particular formula holds true. You search for a resource to help your students visualize the relationship between diameter and circumference; you find a resource titled Area and Circumference of a Circle. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. Your high school students are working on a research project, and you want to help them understand how to use correlation coefficients to analyze data. Searching SAS Curriculum Pathways, you find a resource called Beyond the Correlation Coefficient. What type of resource have you found, what is its QL \#, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. When possible, you incorporate scientific applications of concepts into your instruction for high school students. Since your students will be learning about logarithms and logarithmic scales soon, you search SAS Curriculum Pathways and find the resource Intensity of an Earthquake. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students understand how to solve simple algebraic equations. List the title and Quick Launch number of the resource you could use.
Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for mathematics, which your students can address through the use of Exploring Graphs of Linear Equations, QL \#1311? Hint: Enter 1311 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed Pythagorean Theorem and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for "pythagorean theorem." In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. As part of their study of conic sections, your students are working on the Satellite Orbits lesson. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 504 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Statistics and Probability category, you find a resource you like called Sampling Methods and Bias. How can you bookmark this specific resource so that you can find it easily in the future? Hint: Browse resources in Mathematics $\rightarrow$ Statistics and Probability. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways Science

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As the only science teacher in a small high school, you teach all the science classes. With so many preps, you are constantly scrambling to find new resources to use with your students. For which science categories does SAS Curriculum Pathways provide resources?
Hint: Click Science under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources that address chemical reactions. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use? Hint: Search for "chemical reactions." Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource that addresses how energy flows through an ecosystem. List the title and Quick Launch number of the resource you could use.
Hint: Use Search.
4. You want to integrate technology into more of your lessons this semester. You are looking for an interactive lesson that will help your earth science students learn about planetary motions and the physical laws that explain that motion. You find VLab: Planetary Motion in SAS Curriculum Pathways. What type of resource have you found, what plug-in(s) does it require, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. Before a test, you want to review with your middle school students how viruses cause infection and your search results provide the lesson Viruses. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. You have a class of students with mixed abilities and are looking for a lesson that lends itself to differentiation. Your high school biology students are studying the relationship between cell size and the cell's ability to maintain homeostasis. Searching SAS Curriculum Pathways, you find the resource Cell Sizes. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You want to engage students with a hands-on activity. You are teaching a unit on the general properties of acids and bases to your high school chemistry students. Searching SAS Curriculum Pathways, you find the resource Lab: Indicators. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students understand solubility. List the title and Quick Launch number of the resource you could use.
Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for science, which your students can address through the use of VLab: Cell Division, QL \#6?
Hint: Enter 6 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed The Immune System and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for "immune system." In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. You plan to have your students complete the Simple Machines lesson as part of your unit on forces. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 451 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the "Our Universe" category, you find a resource you like called The Water Cycle. How can you bookmark this specific resource so that you can find it easily in the future?
Hint: Browse Resources in Science $\rightarrow$ Our Universe. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways Social Studies

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As the only social studies teacher in a small high school, you have taught all of the history and social studies classes. With so many preps each year, you are constantly scrambling to find new resources to use with your students. For which social studies categories does SAS Curriculum Pathways provide resources?
Hint: Click Social Studies under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources that address the Cold War. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use?
Hint: Search for "cold war." Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource that addresses territorial growth in the United States by the middle of the 19th century. List the title and Quick Launch number of the resource you could use.
Hint: Use Search.
4. Looking for a SAS Curriculum Pathways lesson that will help your U.S. History students learn about the Trail of Tears, you find the resource Indian Removal Act of 1830. What type of resource have you found, what plug-in(s) does it require, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. You want to review the different kinds of economies with your high school students and your search results provide the lesson Economic Systems. What type of resource have you found, what is its QL \#, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. Your middle school history students are studying the first English settlements in the New World. Searching SAS Curriculum Pathways, you find the resource The Jamestown Colony. What type of resource have you found, what is its QL \#, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You are starting a unit on contemporary Africa with your world history students. Searching SAS Curriculum Pathways, you find the resource Mapping the Trans-African Highway Network. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students understand the Civil War. List the title and Quick Launch number of the resource you could use. Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for social studies, which your students can address through the use of Johnson and the Vietnam War, QL \#38?
Hint: Enter 38 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed Islam: The Five Pillars and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for Islam. In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. You are a World History teacher and plan to have your students complete the Ancient Egypt: Famous Pharaohs lesson as part of your unit on ancient Egypt. How can you email directions to your students and recommend this resource to a colleague? Hint: Enter 579 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Civics \& Economics category, you find a resource you like called The Declaration of Independence: Analyzing Grievances. How can you bookmark this specific resource so that you can find it easily in the future? Hint: Browse Resources in Social Studies $\rightarrow$ Civics \& Economics. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways Spanish

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As the only Spanish teacher in a small high school, you teach all levels of Spanish language classes. With so many preps each year, you are constantly scrambling to find new resources to use with your students. For which Spanish categories does SAS Curriculum Pathways provide resources?
Hint: Click Spanish under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources that address verb conjugation. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use?
Hint: Search for "verb conjugation." Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource that addresses the use of por and para. List the title and Quick Launch number of the resource you could use. Hint: Use Search.
4. You would like to show your class a "mapa" of the Spanish-speaking countries and find the Spanish Interactive Atlas when searching SAS Curriculum Pathways. What type of resource have you found, what plug-in(s) does it require, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. You want to teach your students how to say "hello" and "goodbye" in Spanish and your search results provide the lesson Greetings and Farewells. What type of resource have you found, what is its QL \#, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. Your middle school students are learning how to tell time in Spanish. Searching SAS Curriculum Pathways, you find the resource called Telling Time. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You are starting a new lesson on the expression "tener que + infinitive" with your middle school students. Searching SAS Curriculum Pathways, you find the resource called What I Have to Do (using tener que). What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students write in Spanish. List the title and Quick Launch number of the resource you could use. Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for world languages, which your students can address through the use of Adjective Agreement, QL \#955?
Hint: Enter 955 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed Regular -ar Verbs and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for verbs. In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. As part of their study of idiomatic expressions, your students are working on the Spanish Proverbs lesson. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 423 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Everyday Life category, you find a resource you like called Yerba Mate. How can you bookmark this specific resource so that you can find it easily in the future?
Hint: Browse resources in Spanish $\rightarrow$ Everyday Life. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways Elementary

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As an elementary teacher, you teach all disciplines. With so many preps, you are constantly scrambling to find new resources to use with your students. For which English Language Arts categories does SAS Curriculum Pathways provide resources at the elementary level?
Hint: Click English Language Arts under the Browse Resources heading and then Level.
2. You've searched SAS Curriculum Pathways for resources that address reading skills. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use? Hint: Search for reading skills. Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource that addresses number comparison. List the title and Quick Launch number of the resource you could use.
Hint: Use Search.
4. Looking for a SAS Curriculum Pathways lesson that will help your students learn about the Amazon Rainforest, you find the resource Mapping the Amazon Rainforest. What type of resource have you found, what plug-in(s) does it require, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. Your want to track your students' reading skills, but taking running records can be very time consuming. You search for a resource to help conduct, grade, and analyze running records; you find a resource titled Reading Records. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. You want to encourage your students to take ownership of their own learning by setting, tracking progress toward, and reflecting on academic goals. Searching SAS Curriculum Pathways, you find the resource Data Notebook. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You've noticed that many of your students have trouble remembering the days of the week in Spanish. Searching SAS Curriculum Pathways, you find the resource Los dias de la semana. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your students punctuate sentences correctly. List the title and Quick Launch number of the resource you could use. Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality? Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for math, which your students can address through the use of Simplifying Expressions Using Order of Operations, QL \#1319? Hint: Enter 1319 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed M\&M's: Are the colors evenly distributed worksheet and emailed you their results. Where would you find the answer key for this worksheet? Hint: Search for "color distribution." In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. As part of your Spanish language instruction, your students are working on with the Spanish Writing Tablet. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 1348 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Statistics and Probability category, you find the Data Depot. How can you bookmark this specific resource so that you can find it easily in the future?
Hint: Browse Resources in Mathematics $\rightarrow$ Statistics and Probability. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.

Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work.

## Exploring SAS Curriculum Pathways All Disciplines

This exercise will familiarize you with the available resources and features. Log in to SAS Curriculum Pathways and answer the following questions.

1. As the only science teacher in a small high school, you teach all the science classes. With so many preps, you are constantly scrambling to find new resources to use with your students. For which science categories does SAS Curriculum Pathways provide resources?
Hint: Click Science under the Browse Resources heading.
2. You've searched SAS Curriculum Pathways for resources that address factoring. As you anticipated, your search yields a number of resources that fit your instructional needs. How can you keep a record of your search results for later use?
Hint: Search for factoring. Review the options available on the search results page. (You may need to scroll down the page.)
3. You are substituting for a colleague. You need to find a resource that addresses the use of por and para. List the title and Quick Launch number of the resource you could use. Hint: Use Search.
4. Looking for a SAS Curriculum Pathways lesson that will help your U.S. History students learn about the Trail of Tears, you find the resource Indian Removal Act of 1830. What type of resource have you found, what plug-in(s) does it require, and how is it described? Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.

## Exploring SAS Curriculum Pathways

5. Your middle school students can often use formulas to solve problems, but sometimes they don't understand why a particular formula holds true. You search for a resource to help your students visualize the relationship between diameter and circumference; you find a resource titled Area and Circumference of a Circle. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
6. You have a class of students with mixed abilities and are looking for a lesson that lends itself to differentiation. Your high school biology students are studying the relationship between cell size and the cell's ability to maintain homeostasis. Searching SAS Curriculum Pathways, you find the resource Cell Sizes. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
7. You've noticed that many of your middle school students have trouble producing complete, well-constructed sentences. Searching SAS Curriculum Pathways, you find the resource Frederick Douglass Shows How to Avoid Fragments and Run-ons. What type of resource have you found, what is its QL \#, and how is it described?
Hint: Use Search to find the resource, click the "more" link, and also roll over the Type icon.
8. You want to find an interactive tool to help your middle school students punctuate sentences correctly. List the title and Quick Launch number of the resource you could use.
Hint: Use Search and note the level of each resource.

## Exploring SAS Curriculum Pathways

9. Now that you've discovered this interactive tool, you want to introduce it to your students. How can they quickly learn about its features and functionality?
Hint: Launch the interactive tool and review the options available on its home page.
10. You are a new teacher working to become familiar with curriculum standards. What is one objective, according to your state's standards for social studies, which your students can address through the use of Johnson and the Vietnam War, QL \#38?
Hint: Enter 955 in the QL \# (Quick Launch) box and click GO (or press Enter). Select Standards, available at the top of the resource window.
11. Your students completed The Immune System and e-mailed you their quiz results. Where would you find the answer key for this online quiz?
Hint: Search for "immune system." In the search results, click the resource title to launch it. Choose from the selections available at the top of the resource window.
12. As part of their study of idiomatic expressions, your students are working on the Spanish Proverbs lesson. How can you e-mail directions to your students and recommend this resource to a colleague?
Hint: Enter 423 in the QL \# box and click GO (or press Enter). Choose from the selections available at the top of the resource window.

## Exploring SAS Curriculum Pathways

13. Reviewing the resources available in the Statistics and Probability category, you find a resource you like called Sampling Methods and Bias. How can you bookmark this specific resource so that you can find it easily in the future? Hint: Browse Resources in Mathematics $\rightarrow$ Statistics and Probability. Choose from the options available once you launch this resource.
14. You are getting a set of iPads for your classroom. Where can you find information about mobile resources (apps)?
Hint: Homepage $\rightarrow$ Questions about mobile? $\rightarrow$ Apps $\rightarrow$ Learn more.
[^0]Interactive Tool Guide
English Language Arts
Strategies for Reading Mythology

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for mythology. | Resource types are indicated in the search results. |
| Select Strategies for Reading Mythology (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and skim all sections. | In particular, review Objectives and Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Read the purpose and overview statements. | Located under the title |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click GO. |  |
| Predict |  |
| Action | Note |
| Click image 1. Read and listen to the information about the image. | Click the Play button above the text. |
| Answer question 1 in the Predictions organizer. Then close image 1. | Questions help students build background knowledge and make predictions. All work entered into the organizer will be saved. |
| Repeat this process for images 2-6. | Use the scroll bars to see all images and questions. |
| Continue by clicking the Identify tab at the top of the page. |  |
| Identify |  |
| Action | Note |
| Read and listen to the passage. Roll over highlights to see definitions. | Click the Play button above the passage. |
| In the Identification organizer (at right), record any new thoughts about the six questions you answered earlier. | Your earlier responses appear in this organizer. <br> If needed, you may return to the Predictions organizer by clicking the Predictions bar. |
| When finished, click the Organize tab at the top of the page. |  |

Interactive Tool Guide

| Organize |  |
| :--- | :--- |
| Begin organizing details by clicking the highlighted text <br> "Coyote was shut inside the tree." Select one of the two <br> categories to assign this text to the organizer. | The highlighted text appears in the organizer <br> under the category you selected. |
| Continue to organize details by selecting additional <br> examples of highlighted text. | The magnifying glass icon in the organizer <br> allows you to locate highlighted passages in <br> the story. The "x" enables you to delete <br> entries from the organizer. |
| Answer the questions in the organizer. | Questions help students make inferences. <br> If needed, you may return to the Predictions <br> or Identification organizers by clicking those <br> bars. |
| When finished, click the Assess tab at the top of the <br> page. | When finished, you may check your work by <br> selecting the green check box. <br> If needed, you may return to the Predictions, |
| Assess | Identification, or Organization organizers by <br> clicking those bars. |
| In the Assessment organizer, complete the Conclusions <br> section by selecting True or False for each of the ten <br> statements. | As instructed by their teacher, students may <br> save, print, or e-mail their work (as well as the <br> original passage). <br> Student work is not saved within the <br> interactive tool itself. |
| In the organizer, complete the Summary section by <br> selecting the best of the three summary paragraphs. Use <br> the space provided to explain your selection (as time <br> permits). | Select Save, Print, E-mail at the top of the page. |

Interactive Tool Guide
English Language Arts
Writing Reviser

| Preparation Action |  |
| :--- | :--- |
|  | Note |
| Search for "writing process." | Resource types are indicated in the search <br> results. |
| Select Writing Reviser (interactive tool) from the available <br> resources. | Clicking a title within the search results <br> launches the resource in a new tab or <br> window. |
| Select the Lesson Guide (available at the top of the <br> resource window) and skim all sections. | In particular, review Objectives and <br> Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the <br> resource. Teachers can add instructions, if <br> desired, and distribute to classes. |
| Click Quick Tour (at the bottom of the home page) for a <br> short explanation of how to use this interactive tool. | A sample essay appears in the work space. <br> Using the "create essay" option, students may <br> copy and paste from Microsoft Word, or type <br> their draft essay into the work space. Or they <br> may use "load essay" to import an HTML file <br> from Writing Drafter. |
| Click demo at the bottom of the screen. |  |
| Setup |  |
| Action |  |
| Read "about your essay" to learn what students can enter |  |
| in the work space. |  |

## Interactive Tool Guide

| $\begin{array}{l}\text { Consider the questions (Step 2) to the left of the work } \\ \text { space. }\end{array}$ | $\begin{array}{l}\text { Students may revise a draft as necessary by } \\ \text { typing directly into the working draft area. }\end{array}$ |
| :--- | :--- |
| $\begin{array}{l}\text { Click Structure to return to the main menu. Briefly explore } \\ \text { other sections in Essay Structure. }\end{array}$ |  |
| Closer Look | Note |
| From the menu, select Sentence Economy $\rightarrow$ Wordiness. |  | \(\left.\begin{array}{l}Through the remaining menu options, <br>

students explore ways to improve sentence <br>
economy, variety, power, and clarity.\end{array}\right\}\)

Interactive Tool Guide
English Language Arts and Elementary Punctuation Rules!

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for punctuation. | Resource types are indicated in the search results. |
| Select Punctuation Rules! (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Objectives and Assessment. Note the printable assessments and answer keys. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click Go. |  |
| Menu Page |  |
| Action | Note |
| From the tabs at the top of the screen, select the comma. | The nine tabs show the punctuation marks addressed in this interactive tool. |
| From the drop-down menu, select 1a: Main clauses. | The drop-down menu shows seven different uses of the comma addressed in this interactive tool. |
| The Rule |  |
| Action | Note |
| Read the rule for using commas with main clauses. Then click Play to watch an animated explanation of the rule. | Captions are available if desired. |
| Select Practice Sentences at top. |  |
| Practice Sentences |  |
| Action | Note |
| Read the directions and roll over the highlighted words for definitions. | The Glossary at the bottom of the screen includes all defined terms in this interactive tool. |
| Read the first practice sentence. Use the drop-down menu to select an appropriate coordinate conjunction. Then click Check Work. | If a pop-up window appears-asking you to try again-close the pop-up window and make another selection from the drop-down menu. Then click Check Work. Repeat as necessary. |

Interactive Tool Guide

| Punctuate the practice sentence correctly by dragging the comma to the correct location in the sentence. Then click Check Work. | The word you selected now appears in the sentence. <br> If a pop-up window appears-asking you to try again-close the pop-up window and make another selection from the drop-down menu. Then click Check Work. Repeat as necessary. |
| :---: | :---: |
| A pop-up window will appear saying, "Good job." Click OK, and then use the right arrow at bottom to go to practice sentence 2. | There are 10 practice sentences in this section. |
| Read the second practice sentence. Type an appropriate coordinate conjunction in the space provided. Click Check Work. | If a pop-up window appears-asking you to try again-close the pop-up window and make another selection from the drop-down menu. Then click Check Work. Repeat as necessary. |
| Punctuate the practice sentence correctly by dragging the comma to the correct location in the sentence. Then check Check Work. |  |
| A pop-up window will appear saying, "Good job." Click OK, and then use the right arrow at bottom to go to practice sentence 3. |  |
| Following the same steps to complete practice sentences 3-10. | Some of the practice sentences will require more than one selection or entry. |
| When finished with all practice sentences, select Quiz at top. |  |
| Quiz |  |
| Action | Note |
| Read the directions at top. Punctuate each of the four sentences by dragging the comma to the correct location. | Not all sentences necessarily need a comma. In such cases, students do not need to drag the comma. |
| When done with all four sentences, click Submit. A dialog box will appear asking if you want to submit your answers. Click Yes. |  |
| A second dialog box will appear. Read the three options for continuing and click OK. |  |
| You may now select another comma use from the dropdown menu, select another punctuation mark from the tabs at top, or select Save, Print, E-mail at the bottom of the screen. | As instructed by their teacher, students may save, print, or e-mail their work. <br> Student work is not saved within the interactive tool itself. |

Interactive Tool Guide
English Language Arts
Exploring Poetry About Sports

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for poetry. | Resource types are indicated in the search results. |
| Select Exploring Poetry About Sports (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Objectives and Assessment. Note the printable assessments and answer keys. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click GO. |  |
| "Makin' Jump Shots": Predict |  |
| Action | Note |
| Read the directions above the image. | "About the poet" (below the image) provides useful information about the poem students will read. |
| Select Answer Question. Read the question, enter your response in the space provided, and select "Save and go to 2." |  |
| "Makin' Jump Shots": Listen |  |
| Action | Note |
| Read the poem and roll over the highlighted words to see definitions. |  |
| Click Play to listen to the poem. |  |
| Select Answer Question. Read the questions, enter your responses in the space provided, and select "Save and go to 3 ." | Notice that your response from Predict appears at the top of the pop-up window. |
| "Makin' Jump Shots": Visualize |  |
| Action | Note |
| Click Play to watch a video showing images related to the poem. | Captions can be turned on below the image. |
| Select Answer Question. Read the question, enter your response in the space provided, and select "Save and go to $4 . "$ | Your responses from Listen appear at the top of the pop-up window. |

Interactive Tool Guide

| "Makin' Jump Shots": Analyze | Action |
| :--- | :--- |$|$| Note |  |
| :--- | :--- |
| Click on the first highlighted word. Read the Notes about <br> key points, and use the space provided to add notes if <br> desired. Then click Close. |  |
| Repeat this process for each highlighted section. |  |
| Select Answer Question. Read the question, select the <br> best response, and enter an explanation for your choice <br> in the space provided. Then select "Save and go to the <br> next poem." |  |
| "Pitcher" and "Solar Plexus" |  |
| Action <br> Follow the same process to explore the second and third <br> poems. | In the third poem, students are asked to <br> visualize images without the benefit of a <br> video. |
| When you finish, select Save, Print, E-mail at the bottom <br> of the page. | As instructed by their teacher, students may <br> save, print, or e-mail their work. <br> Student work is not saved within the |
| interactive tool itself. |  |

Interactive Tool Guide
Mathematics
Volume: Prisms and Cylinders

| Preparation |  |
| :--- | :--- |
| Action | Note |
| Search for volume. | Resource types are indicated in the search <br> results. |
| Select Volume: Prisms and Cylinders (interactive tool) <br> from the available resources. | Clicking a title within the search results <br> launches the resource in a new tab or <br> window. |
| Select the Lesson Guide (available at the top of the <br> resource window) and read all sections. | In particular, review Assessment. Note the <br> printable worksheets and answers. |
| Click Share to view the Assign Feature. | Provides directions for student access to the <br> resource. Teachers can add instructions, if <br> desired, and distribute to classes. |
| Review the information found on the "getting started" tab. |  |
| Demo | Action |
| Select the "demo" tab. <br> Choose "Prisms and cylinders" from the drop-down <br> menu. | Click the buttons at the bottom right to <br> continue or see a previous screen. |
| View the "Prisms and cylinders" demo. |  |
| Now choose "Composite figures" from the drop-down <br> menu. | Click the buttons at the bottom right to <br> continue or see a previous screen. |
| View the "Composite figures" demo. |  |
| Practice | Click and drag the figure to view all sides.   <br> Action  Use the dimensions at the bottom of the <br> Create 3D Figure panel and the appropriate <br> area formula for the figure created. Click the <br> calculator, available in the top right corner of <br> the tool, as necessary. <br> Click the "practice" tab.   <br> Begin with "prisms and cylinders", and follow the   <br> directions in the Create 3D Figure panel.   |
| After creating a 3D figure, perform the steps in the <br> Calculate Volume panel. <br> You can check your work at any time. After <br> three incorrect responses, you have the <br> option of viewing a solution. |  |
| Create several figures until you are comfortable with <br> calculations. |  |

## Interactive Tool Guide

| Click the radio button for "composite figures" at the top of <br> the Create 3D Figure panel. |  |
| :--- | :--- |
| Follow the directions to create a 3D figure. | Click and drag the figure to view all sides, <br> especially the bases. |
| Calculate the volume in the Calculate Volume Panel. | Clickas needed. |
| Create several figures until you are comfortable with <br> calculations. |  |
| Proof |  |
| Action | Review the composite figures "demo" if <br> needed. |
| Click the "proof" tab. | Select from drop-down menus and enter <br> information. |
| Read through the derivation of the formulas. |  |
| Complete the derivations, including the conclusion, and <br> click |  |

Interactive Tool Guide
Mathematics
Simplifying Expressions Using Order of Operations

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "order of operations." | Resource types are indicated in the search results. |
| Select Simplifying Expressions Using Order of Operations (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. Note the printable problem sets with answers. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Read through the description and click Start. |  |
| Practice |  |
| Action | Note |
| The Practice tab is selected. <br> Click through some of the fifty problems and select a problem. Click Start Work. | You can enter your own simple expression, if desired; then click Start Work. |
| Use the palette to the left of the work area and/or your keyboard to enter the steps to simplify the problem. | Each step of your work is checked if the Check Work box is selected. |
| Click on the last step of your work and click Copy to Answer. Then click Check Answer. | Try another problem and experiment with the other buttons on the interface, such as Copy Line, Delete Line, and Undo. |
| Quiz |  |
| Action | Note |
| Click the Quiz tab at the top of the tool. Read the information in the pop-up window before closing it. | Disabling pop-up blockers is important as they can interfere with the Student Answer Page. |
| Select one of the twenty problems. Click Start Work and begin simplifying. | Steps are not checked as you work in the Quiz section. |
| Click on the last step of your work and click Copy to Answer. Then click Done with Problem. | Clicking Done with Problem puts your problem, work, and answer on the Student Answer Page. |

Interactive Tool Guide

| Click Open Answer Page. | You can view (at any time) what you have <br> submitted to the Student Answer Page. <br> Steps and final answers are marked right or <br> wrong but cannot be changed. From this view <br> you can save, print, or e-mail the Student <br> Answer Page. |
| :--- | :--- |
| Click Return to Quiz. | You can continue working on the quiz even if <br> you do not click Return to Quiz. |
| If the Student Answer Page is left open after <br> completing additional problems, click Update <br> to update the page with new answers. |  |

Interactive Tool Guide
Mathematics
Exploring Transformations

| Preparation | Action |
| :--- | :--- |
| Search for transformations. | $\begin{array}{l}\text { Resource types are indicated in the search } \\ \text { results. }\end{array}$ |
| $\begin{array}{l}\text { Select Exploring Transformations (interactive tool) from } \\ \text { the available resources. }\end{array}$ | $\begin{array}{l}\text { Clicking a title within the search results } \\ \text { launches the resource in a new tab or } \\ \text { window. }\end{array}$ |
| $\begin{array}{l}\text { Select the Lesson Guide (available at the top of the } \\ \text { resource window) and read all sections. }\end{array}$ | $\begin{array}{l}\text { In particular, review Assessment. Note the } \\ \text { printable Example Set. }\end{array}$ |
| Click Share to view the Assign Feature. | $\begin{array}{l}\text { Provides directions for student access to the } \\ \text { resource. Teachers can add instructions, if } \\ \text { desired, and distribute to classes. }\end{array}$ |
| Read through the description and click Start. | $\begin{array}{l}\text { This tool can be resized to view a larger } \\ \text { graph. }\end{array}$ |
| Translations | $\begin{array}{l}\text { There are four tabs for each of the different } \\ \text { types of transformations: translations, } \\ \text { reflections, rotations, and dilations. } \\ \text { Examples include line segments, triangles, } \\ \text { and quadrilaterals. }\end{array}$ |
| $\begin{array}{l}\text { The Translations tab is selected. } \\ \text { Click through the six examples and choose one. }\end{array}$ | $\begin{array}{l}\text { In addition, you can } \\ \text { - type values for a and b in the entry } \\ \text { fields }\end{array}$ |
| enove the image on the grid |  |$\}$| Adjust the sliders to view the effects on the image as well |
| :--- |
| as the changes to the mapping statement. |


| Note the Copy Options. | Items can be copied from the tool to another application, such as a word-processing program. Click the info dialog $\mathbf{0}$ for additional information. <br> Copy Options are available on each tab for the other transformations. |
| :---: | :---: |
| Select the Table of Measures. | Measures of the angles (for triangles and quadrilaterals) and lengths of the sides are displayed in a separate window. <br> A Table of Measures is available on each tab for the other transformations. |
| Reflections |  |
| Action | Note |
| Select the Reflections tab. <br> Click through the six examples and choose one. |  |
| Select a different line of reflection. For $x=c$ and $y=c$ adjust the value for $c$ using the slider, the entry field, or by moving the line of reflection on the grid. <br> Note the changes to the mapping statement. | The statement is only available when the line of reflection is $y=0, x=0, y=x$, and $y=-x$. |
| Rotations |  |
| Select the Rotations tab. <br> Click through the six examples and choose one. |  |
| Adjust the angle of rotation using the slider or entry field. | The mapping statement is available when the angle of rotation is $0^{\circ}, 90^{\circ}, 180^{\circ}, 270^{\circ}$, or $360^{\circ}$. |
| Select the counterclockwise or clockwise option to change the direction of the rotation. | If the graph is not fully visible, click the Fit Graph button. |
| Select the show angle of rotation check box. | View the angle of rotation through different points by dragging the arrows at the end of the rays. |
| Dilations |  |
| Select the Dilations tab. <br> Click through the six examples and choose one. |  |
| Adjust the scale factor ( $k$ ) using the slider or entry field. | You may enter a fraction in the entry field. <br> See User Info for specific instructions. |
| Select the "Show rays" check box to view the rays from the origin through the preimage and image vertices. |  |

Interactive Tool Guide
Mathematics
Graphing Quadratic Functions

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "quadratic function." | Resource types are indicated in the search results. |
| Select Graphing Quadratic Functions (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. Note the printable problem sets with answers. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Read through the description and click Start. | This tool can be resized to view a larger graph. |
| Practice |  |
| Action | Note |
| The Practice tab is selected. <br> Click through some of the twenty problems and select a problem. | In Step 1, you can select one of the provided quadratic functions or enter your own, if desired. <br> Only standard and vertex forms are acceptable forms when creating your own problems. |
| In the Step 2 panel, identify the vertex and two additional points on the parabola. Then click Draw Parabola. | You can click on the grid or enter ordered pairs into the provided fields. <br> Use the ordered pair and/or fraction buttons (in the palette to the right of the equation box) to format your entries. |
| Click Check Graph. | Each point is marked right or wrong on the graph and in the entry fields. <br> If your answer is incorrect, you can try again or view the correct answer. |
| Click Set Grid. | The grid is set to the standard window. You can change the settings of both axes from 100 to 100 . <br> Click the link button to scale each axis individually. |
| Click the Step 3 tab and answer each question. Then click Check Answers. | Each answer is checked right or wrong. <br> You can try again or view the correct answer if your answer is incorrect. |

Interactive Tool Guide

| Quiz | Action |
| :--- | :--- |
| Click the Quiz tab (at the top of the tool). | Disabling pop-up blockers is important as they <br> can interfere with the Student Answer <br> Page. |
| Select one of the ten problems. | In Step 1, you can select one of the provided <br> quadratic functions or enter your own, if <br> desired. |
| In the Step 2 panel, identify the vertex and two additional <br> points on the parabola, click Draw Parabola, and then <br> click Done with Problem. | Steps are not checked as you work in the <br> Quiz section. <br> Clicking Done with Problem puts your <br> problem, work, and answer on the Student <br> Answer Page. |
| Click Open Answer Page. | You can view (at any time) what you have <br> submitted to the Student Answer Page. <br> Steps and final answers are marked right or <br> wrong but cannot be changed. From this view <br> you can save, print, or e-mail the Student <br> Answer Page. |
| Click Return to Quiz. | You can continue working on the quiz even if <br> you do not click Return to Quiz. |

## Exploration Guide <br> Algebra 1 Course

| Preparation |  |
| :---: | :---: |
| Action | Not |
| From the home page, select Mathematics. Click the Algebra 1 link under the Full Course Materials heading. | Individual course units and lessons are now included in our Search feature. |
| Review the scope and sequence of the ten course units. | Two pre-algebra units are also available. |
| Click Expand All to display unit components. | Each unit includes an introduction and individual lessons (the number of lessons in a unit varies). |
| Select the Course Guide (available as a link at the top of the course outline) and scan all sections. | This document provides guidance to teachers as they integrate individual components into instruction or use the entire course as the |
| Log in with your SAS Curriculum Pathways user name and password (if you've not done so already). | Students access the course with the user name assigned to your school (just as they do for individual SAS Curriculum Pathways resources). |
| Select the Introduction for Unit 3. Read the information on this page and watch the video (if time allows). | A Futures Channel video introduces each unit and engages students by exploring |
| Select Lesson 3-4: Using Graphs and Tables to Solve Systems of Equations. |  |
| Click Lesson Guide (available at the top of the resource window) and read all sections. | This document provides an overview of all lessons within a unit. In particular, review the <br> Teacher Materials. Lesson summaries, guided notes, practice/quiz problems, |
| Click Share. | This feature provides directions for student access to the lesson. Teachers can add instructions, if desired, and distribute to classes. <br> Note each section within a unit has a unique Quick Launch number. |
| Tools |  |
| Action | Not |
| Use the Tools menu (available on the right) to access the Palette and Scratch Pad. | Students can access the glossary and Guide Notes from the left navigation panel. |
| Get Ready |  |
| Action | Not |
| Read through this lesson introduction. |  |
| Use the interactive graph to determine the number of rides that cost the same amount at both amusement parks. | Students check their answer by clicking the SHOW ME button. |

Exploration Guide

| Learn |  |
| :---: | :---: |
| Action | Note |
| Access the Learn section by clicking Learn in the left navigation panel or the button at the bottom of the page. | Learn provides instructional content with interactive components and guided practice. <br> Glossary terms are indicated in green. <br> Use the red tab to open and close the |
| Read through Learn page 1, and determine the solutions for the systems of equations. | Targeted feedback-based on student responses-is provided for each question. |
| Go to Learn page 2, and use the interactive graphs to determine the solutions for one of the three systems of equations. |  |
| Go to Learn page 3. Play the video learn about systems of equations with no solution or infinitely many solutions. | Animations use audio and visuals to explain processes step-by-step. |
| Scroll down the page and click the PLAY buttons to hear how different students identified the number of solutions for a particular system of equations. | Students get to see and evaluate different approaches to problems. <br> Elements like these have been integrated into the instruction to address the CCSS Mathematical Practices (in this case, Mathematical Practice 3: construct viable arguments and critique the reasoning of others). |
| Scan through the content on Learn pages 4 through 6 . <br> Work through one question on each page. | Pay attention to the different methods used to present content. |
| Practice |  |
| Action | Note |
| Click Practice in the left navigation panel or the button at the bottom of Learn page 6. | Practice provides additional problems to confirm student learning. |
| Click the Practice Page button to advance through and peruse the 17 practice problems. | After answering a problem, students can check their work. They'll see if their answers are correct, get targeted feedback, and be able to view solutions. |
| Answer problem 14, check your work, and then click Practice Results. | Students can save, print, or send their Practice results (PDF). |

## Exploration Guide

| Review |  |
| :--- | :--- |
| Nction |  |
| Action | Review also provides a lesson summary, print <br> materials, and links to related resources in <br> SAS Curriculum Pathways (if available). |
| Quiz | Note |
| Click Quiz in the left navigation panel, and use the <br> arrows at the top to advance through and peruse the <br> 12 quiz problems. |  |
| After answering a problem, students will click <br> Submit Problem to copy their work to the Quiz <br> Results page. They'll see if their answers are <br> correct, and can save, print or send their Quiz <br> results (PDF). |  |

Interactive Tool Guide

## Science

VLab: Stream Ecology

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for ecosystem. | Resource types are indicated in the search results. |
| Select VLab: Stream Ecology (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Getting Started |  |
| Action | Note |
| Briefly review the background information on stream ecology and the use of the simulation. | About the Topic contains basic prerequisite information that all students should know prior to beginning the virtual lab. <br> About the Simulation provides general instructions for using the virtual lab; identifies all buttons, sliders, controls, and data readouts; and lists any disclaimers. |
| Click Quick Tour (at the top of the window) for a short explanation of how to use this interactive tool. |  |
| Data \& Observations/Analysis \& Conclusions/Glossary |  |
| Action | Note |
| Select the Data \& Observations tab and examine the contents. | Data \& Observations provides directions for using the activity to carry out one line of inquiry. (A printable version is also available.) <br> The virtual lab is flexible: it can be used in conjunction with the Data \& Observations, with teacher-designed inquiries, or as a presentation tool. |
| Click Data Sheet (PDF) to view printable data sheet. | Notice data tables and graph templates. You will complete this exercise using an abbreviated version of the Data Sheet (see Appendix). |
| Select the Analysis \& Conclusions tab and examine the contents. | Printable exercises for data analysis, followup, and application |
| Select the Glossary tab. | Definitions are provided for terms used in the other three sections. |

Interactive Tool Guide

| Simulation <br> Activity: Establishing Baseline Conditions <br> Follow the directions below to fill in the left side of Table 1 (Appendix, Data Sheet). |  |
| :--- | :--- |
| Action | Note |
| Use the Resize button to enlarge the simulation. | Resizing resets the simulation, clearing out <br> current data and work. |
| Locate the Set stream conditions and the Select a <br> pollutant panels. | Buttons to the right of the activity enable you <br> to expand it, darken the background, or pop it <br> into a separate window. |
| Locate the View effect of pollution on stream panel. | Record the dissolved oxygen, temperature, <br> and species composition of the stream at a <br> distance of 0 km from the pollutant source. |
| Use the sensor to sample the stream at different <br> locations upstream and downstream of the pollutant <br> source. | Observe and record any changes in stream <br> conditions and species composition. |
| Activity: Effect of a Pollutant <br> Follow the directions below to fill in the right side of Table 1 (Appendix, Data Sheet). <br> Action |  |
| Add an organic pollutant to the stream. Select Animal <br> Waste. | Make a selection using the pull-down menu. |
| Select the ratio of 1:100. | Specify ratio using the pull-down menu. |
| Use the sensor to sample the stream at different <br> locations upstream and downstream of the pollutant <br> source. | Observe and record any changes in stream <br> conditions and species composition. |
| Activity: Pollution Scenario: To grow or not to grow? <br> Follow the directions below to fill in Table 2 (Appendix, <br> Action | Data Sheet). |
| Read the scenario presented on the Data Sheet. | Note |
| From the scenario, identify and record stream conditions <br> and pollutant for two experimental trials, which must be <br> performed in order to answer the scenario question. |  |
| Set stream conditions and pollutant for Trial 1, and record <br> your observations. Use the sensor to sample the stream <br> at different locations upstream and downstream of the <br> pollutant source. | Observe and record any changes in stream <br> conditions and species composition in the left <br> side of Table 2. |
| Set stream conditions and pollutant for Trial 2, and record <br> your observations. Use the sensor to sample the stream <br> at different locations upstream and downstream of the <br> pollutant source. | Observe and record any changes in stream <br> conditions and species composition in the left <br> side of Table 2. |
| Answer the question posed by the scenario. |  |

Interactive Tool Guide

## Science

VLab: Evidence for Plate Tectonics

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "plate tectonics." | Resource types are indicated in the search results. |
| Select VLab: Evidence for Plate Tectonics (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Welcome Screen |  |
| Action | Note |
| Read the learning objectives. |  |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Press the Play button to watch the Welcome Video. | Describes the purpose and objectives for the virtual lab, provides context, and states the Focus Question. |
| Things to Know |  |
| Action | Note |
| Click the Start button. |  |
| Read the information contained in the Things to Know panel. | Things to Know identifies the components of, and provides instructions for, the online Journal. |
| Click the X to close Things to Know. | Things to Know remains accessible throughout student use of the virtual lab (via the question mark). |
| Tab 1: divergent plates <br> Follow the directions below to interact with the Simulation and complete the online Journal. |  |
| Action | Note |
| Within the Journal, scroll down to question 1.2 and view the blue Directions box. Read instructions for interacting with the Simulation. |  |
| Move the slider to see how the Simulation works. | When projecting the Simulation, you may choose to "Zoom In" by right-clicking on the Simulation. To move within the zoomed image, hold the left-mouse key down and drag. |
| Drag the slider all the way to the left. | Observe the values indicated in the Data panel (number of years ago, direction of rock's magnetic field, and direction of planet's magnetic field). |
| Use the Transfer Data button to transfer age and direction data (for sample area 1) from the Data panel to the first row of the table. | Values transfer from the Simulation to the Journal table. |

Interactive Tool Guide

| Use the slider (Simulation) to view the data for sample area 2. | Observe the values indicated in the Data panel. |
| :---: | :---: |
| Use the Transfer Data button to transfer age and direction data from the Data panel to the table. | Values transfer from the Simulation to the Journal table. |
| Repeat the previous two steps to collect data for the remaining sample areas (3-8). | As noted in the Things to Know section, the Journal does not check answers for correctness. Be sure to transfer data to the correct row. |
| Tab 2: convergent plates Follow the directions below to interact with the Simulation and complete the online Journal. |  |
| Action | Note |
| Select Tab 2. <br> Scroll down and read the directions (blue box) that follow question 2.4 (Journal). |  |
|  |  |
| Read question 2.5. Move the slider (Simulation) and examine what happens as two ocean plates converge. |  |
| Record your observations in the space provided for question 2.5 (Journal). |  |
| Tab 3: transform plates <br> Follow the directions below to interact with the Simulation and complete the online Journal. |  |
| Action | Note |
| Select Tab 3. |  |
| Move the slider (Simulation) and observe what happens as two lithospheric plates slide past one another. |  |
| Record your observations in the space provided for question 3.1 (Journal). |  |
| Tab 4: analysis |  |
| Action | Note |
| Select Tab 4. | The Analysis section can be printed and completed without the use of a computer (for example, as a homework assignment). |
| Read question A.11, the Focus Question. | Observe the level of understanding students will acquire after completing the entire virtual lab. |
| Select the print, save, or e-mail button. | Students enter name, class, and sections to print/save or send. <br> By entering a valid e-mail address, students can send work to the teacher, to their own email accounts, etc. <br> Student work is not saved within the interactive tool itself. |
| If time allows, feel free to examine each of the tabs in more detail. |  |

Interactive Tool Guide
Science
VLab: Free Fall

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for acceleration. | Resource types are indicated in the search results. |
| Select VLab: Free Fall (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Welcome Screen |  |
| Action | Note |
| Read the learning objectives. |  |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Press the Play button to watch the Welcome Video. | Describes the purpose and objectives for the virtual lab, provides context, and states the Focus Question. |
| Things to Know |  |
| Action | Note |
| Click the Start button. |  |
| Read the information contained in the Things to Know panel. | Things to Know identifies the components of, and provides instructions for, the online Journal. |
| Click the X to close Things to Know. | Things to Know remains accessible throughout student use of the virtual lab (via the question mark). |
| Tab 1: mass \& size Follow the directions below to interact with the Simulation and complete the online Journal. |  |
| Action | Note |
| Read the introductory information at the top of the Journal. | Rollover definitions are provided for highlighted terms. <br> The blue Directions box provides instructions for interacting with the Simulation. |
| Select Trial 1 from the pull-down menu; then click the DROP button. | When projecting the Simulation, you may choose to "Zoom In" by right-clicking on the Simulation. To move within the zoomed image, hold the left-mouse key down and drag. |
| Observe the values indicated in the Data panel (drop times and final velocities for both objects). |  |
| Use the Transfer Data button to transfer time and velocity data from the Data panel to the Trial 1 table. | Values transfer from the Simulation to the Journal table. |

Interactive Tool Guide

| Record your observations in the space provided for <br> question 1.2 (Journal). |
| :--- |
| Tab 2: air resistance <br> Follow the directions below to interact with the Simulation and complete the online Journal. <br> Action |
| Select Tab 2; then scroll down and read section 2.5 <br> (Journal). |
| Select Trial 3 from the pull-down menu; then click the <br> DROP button. |
| Observe the values indicated in the Data panel (drop <br> times and final velocities for both objects). |
| Use the Transfer Data button to transfer time and velocity <br> data from the Data panel to the Trial 3 table. |
| Record your observations in the space provided for <br> question 2.6 (Journal). |

Tab 3: changes in distance \& velocity
Follow the directions below to interact with the Simulation and complete the online Journal.

| Action | Note |
| :--- | :--- |
| Select Tab 3 and read the introductory information at the <br> top of the Journal. |  |
| Select Trial 1 from the pull-down menu; then click the <br> DROP button. |  |
| Click on the first drop point and transfer the time, <br> distance, and velocity data to the first row of the Trial 1 <br> table. | As noted in the Things to Know section, the <br> Journal does not check answers for <br> correctness. Be sure to transfer data to the <br> correct row. |
| Repeat this process for drop points 2-6. | The Analysis section can be printed and <br> completed without the use of a computer (for <br> example, as a homework assignment). |
| Tab 4: analysis | Observe the level of understanding students <br> will acquire after completing the entire virtual <br> lab. |
| Select Tab 4. | Students enter name, class, and sections to <br> print/save or send. |
| Read question A.11, the Focus Question. | By entering a valid e-mail address, students <br> can send work to the teacher, to their own e- <br> mail accounts, etc. |
| Select the print, save, or e-mail button. | Student work is not saved within the <br> interactive tool itself. |
| If time allows, feel free to examine each of the tabs in |  |
| more detail. |  |

Interactive Tool Guide

## Science

VLab: Density

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for density. | Resource types are indicated in the search results. |
| Select VLab: Density (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Getting Started |  |
| Action | Note |
| Briefly review the background information on density and the use of the simulation. | About the Topic contains basic prerequisite information that all students should know prior to beginning the virtual lab. <br> About the Simulation provides general instructions for using the virtual lab; identifies all buttons, sliders, controls, and data readouts; and lists any disclaimers. |
| Click Quick Tour (at the top of the window) for a short explanation of how to use this interactive tool. |  |
| Data \& Observations/Analysis \& Conclusions/Glossary |  |
| Action | Note |
| Select the Data \& Observations tab and examine the contents. | Data \& Observations provides directions for using the activity to carry out one line of inquiry. (A printable version is also available.) <br> The virtual lab is flexible: it can be used in conjunction with the Data \& Observations, with teacher-designed inquiries, or as a presentation tool. |
| Click Data Sheet (PDF) to view printable data sheet. | Notice data tables. You will complete this exercise using an abbreviated version of the Data Sheet (see Appendix). |
| Select the Analysis \& Conclusions tab and examine the contents. | Printable exercises for data analysis, followup, and application |
| Select the Glossary tab. | Definitions are provided for terms used in the other three sections. |

## Interactive Tool Guide

| Simulation <br> Activity: Measuring Mass \& Volume <br> Follow the directions below to fill in Table 1 (Appendix, |
| :--- | :--- |
| Data Sheet). |$\quad$| Note |  |
| :--- | :--- |
| Use the Resize button to enlarge the simulation. | Resizing resets the simulation, clearing out <br> current data and work. |
| Drag and drop Object 1 onto the pan of the triple beam <br> balance. Use your mouse to slide the magnifying glass <br> along the riders to read the mass accurately. | Record this mass (rounded to the nearest 0.1 <br> gram). |
| Record the initial volume of water in the graduated <br> cylinder. | Round your measurement to the nearest 0.5 <br> milliliter. |
| Drag a copy of Object 1 from the Substances panel to the <br> graduated cylinder. | Record the final volume. |
| Calculate and record the object volume (final volume - <br> initial volume). |  |
| Repeat these steps for Object 5. | Action |

Compare the data you collected for the crown to the
Answer question 4. Support your answer with densities provided in the Table of Densities. Is the crown pure gold or some combination of metals?

Interactive Tool Guide
Social Studies
FDR and the New Deal

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for Roosevelt. | Resource types are indicated in the search results. |
| Select FDR and the New Deal (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. Note the printable assessments and answer keys. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Home Page |  |
| Action | Note |
| Review the focus question. |  |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click Start. |  |
| Introduction |  |
| Action | Note |
| View the movie. | Notice the movie controls (play/pause and volume control) and the captions on/off button. |
| Identify the question posed at the conclusion of the movie. | This is the "organizing question" for the interactive tool. |
| Historical Narrative |  |
| Action | Note |
| Click on the FDR and the New Deal tab at the top of the page to launch the historical narrative. | The audio begins automatically. |
| Roll your mouse over the accompanying image. | Captions identify the image and place it in context within the narration section. |
| Click on the 1932 Election Map (interactive point). | Interactive Points reinforce key learning objectives introduced in the historical narrative. |
| Follow the directions to animate the map and then answer the question. | Question(s) are available only after the map animation is complete. |
| Click the X to close the interactive point. | If all questions are not completed, a prompt appears before the page closes. |
| Click the arrow (to the right of the image) to continue with the historical narrative. | If the interactive point is not completed, a prompt appears before the historical narrative continues. |
| After listening to the audio on page 2 (of 22), click the green commentary icon. |  |

Interactive Tool Guide

| Listen to the commentary. | The audio begins automatically. <br> Commentary provides different viewpoints, <br> presents questions for consideration, or adds <br> supplemental information. |
| :--- | :--- |
| Close the commentary and then proceed to page 3 by <br> clicking the arrow. | Students can navigate to individual pages <br> within the historical narrative by clicking on <br> the blue dots at the bottom of the screen. |
| Continue through the historical narrative-reading the <br> content, listening to the audio, examining the images, and <br> reviewing the commentaries. |  |
| On page 4, click the Inaugural Address interactive point. | The excerpt transcript is available from the <br> Transcript bar located above the image. |
| Follow the directions to review this excerpt from FDR's <br> 1933 inaugural address. | There are 22 historical narrative pages and 10 <br> interactive points in this particular interactive <br> tool. |
| Answer the question and then close the interactive point. | Test Your Knowledge provides three different <br> assessment activities. |
| As time permits, examine the remaining historical <br> narrative sections and interactive points. | Practice reviews key terms and concepts from <br> The historical narrative. Students are prompted <br> To complete the activity with 100\% accuracy. <br> Check Answers is always available. |
| Chour Knowledge |  |

Interactive Tool Guide

## Social Studies

Freedom of Speech in School

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "freedom of speech." | Resource types are indicated in the search results. |
| Select Freedom of Speech in School (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review the Scoring Guide and Wrap-Up links. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Home Page |  |
| Action | Note |
| Read the focus question. | The focus question is on the raised bar in the center. This is the "organizing question" for the interactive tool. |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click GO. |  |
| Background Movies |  |
| Action | Note |
| Examine the Movie Notes. | Students take notes on key information from the movies. |
| Click the first film icon to play movie \#1. | Notice the movie controls (play, pause, stop, and scroll) and the captions on/off button. |
| Play the fourth movie. | This final movie sets up the focus question and directs students to proceed to the Document Analyzer. |
| Document Analyzer |  |
| Action | Note |
| Select Document Analyzer (top-right). |  |
| Click play to view an animation showing how to analyze documents. |  |
| Roll over the document icons (at the top) and read the titles of the documents. |  |
| Click the document icon for the Court Majority Opinion. | Notice About the Document and the Audio Excerpt. |
| Open and read the Directions (above the image of Judge Fortas). | Click to close the Directions. |
| Read the document. Roll over some of the words highlighted in blue. | The rollover explanations and definitions help to enhance student understanding. |

## Interactive Tool Guide

| Select a passage that pertains to the focus question. Use the mouse to highlight the passage. | Select short passages that pertain to either side of the focus question. Notice the Make Comments icon appears. |
| :---: | :---: |
| Click the Make Comments button that appears as you highlight a passage. | Notice the Document Analysis window opens. |
| Enter brief comments regarding the highlighted passage in the Analysis box. | Explain how the selected passage relates to either side of the focus question. |
| Select the statement that best categorizes the passage. Click the OK button. | Notice numbered tabs for each passage you select. Students can click on the tabs to open and edit entries. |
| Select Confederate Flag Banned (fifth document) and repeat the analysis process. |  |
| After analyzing the document, click the Review All button. | Each entry includes the document title, the selected passage, the student's analysis, and categorization of the passage (based on the answer to the focus question). <br> Entries display in a horizontally scrolling window. Students can edit or delete entries. |
| Click Return to Documents. | As time permits, examine the other documents and update your analyses. |
| Click Save, Print, Send. | Students save, print, or e-mail their work at their teacher's request. |

Interactive Tool Guide
Social Studies
Renaissance Man: Leonardo

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for renaissance. | Resource types are indicated in the search results. |
| Select Renaissance Man: Leonardo (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Materials. Note the printable assessments and answer keys. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Home Page |  |
| Action | Note |
| Review the focus question. |  |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Type in your name and click Start. |  |
| Introduction |  |
| Action | Note |
| View the movie. | Notice the movie controls (play/pause and volume control) and the captions on/off button. |
| Identify the question posed at the conclusion of the movie. | This is the "organizing question" for the interactive tool. |
| Historical Narrative |  |
| Action | Note |
| Click on the Renaissance Man: Leonardo tab at the top of the page to launch the historical narrative. | The audio begins automatically. |
| Roll your mouse over the accompanying image. | Captions identify the image and place it in context within the narration section. |
| After listening to the audio on page 1 (of 10 ), click the green commentary icon. | After listening to the audio on page 1 (of 10), click the green commentary icon. |
| Listen to the commentary. | The audio begins automatically. <br> Commentary provides different viewpoints, presents questions for consideration, or adds supplemental information. |
| Close the commentary and then proceed to page 2 by clicking the arrow. | Students can navigate to individual pages within the historical narrative by clicking on the blue dots at the bottom of the screen. |
| Click Medieval v. Leonardo (interactive point). | Interactive Points reinforce key learning objectives introduced in the historical narrative. |
| Click the X to close the interactive point. | If all questions are not answered, a prompt appears before the page closes. |

Interactive Tool Guide

| Click the arrow (to the right of the image) to continue with <br> the historical narrative. | If the interactive point is not completed, a <br> prompt appears before the historical narrative <br> continues. |
| :--- | :--- |
| Continue through the historical narrative-reading the <br> content, listening to the audio, examining the images, and <br> reviewing the commentaries. |  |
| On page 4, click the Leonardo's Inventions interactive <br> point. | Follow the directions to match Leonardo's sketches with <br> modern inventions; then close the interactive point. |
| As time permits, examine the remaining historical <br> narrative sections and interactive points. | There are 10 historical narrative pages and 4 <br> interactive points in this particular interactive <br> tool. |
| Test Your Knowledge | Test Your Knowledge provides two to three <br> different assessment activities. |
| Click on the Test Your Knowledge tab at the top of the <br> page. | Practice reviews key terms and concepts from <br> the historical narrative. Students are prompted <br> to complete the activity with 100\% accuracy. |
| Click Practice. Drag and drop the terms (at left) to <br> correspond with the correct statements (at right). <br> Check Answers is always available. |  |
| Close the Quiz window and select Save, Print, E-mail. | If you're ready to submit the quiz, select Yes. |
| Click OK, close the Practice window, and select Quiz. | Students save, print, or e-mail their Test Your <br> Knowledge Results, at their teacher's request. |
| For reach question, select the radio button that provided at the top of the page. <br> corresponds to the correct answer. When finished, click <br> submit. | Quiz is a multiple-choice activity that <br> assesses student understanding of the <br> historical narrative. Student outcomes are <br> captured for submission. |

Interactive Tool Guide
Social Studies and Elementary
Interactive Atlas

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for atlas. | Resource types are indicated in the search results. |
| Select Interactive Atlas (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Materials. Note the outline maps provided. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Home Page |  |
| Action | Note |
| Click Quick Tour (at the bottom of the home page) for a short explanation of how to use this interactive tool. |  |
| Click Start to open the atlas. | The atlas opens to a basic map identifying the seven continents and four major oceans. |
| Use the slider bar (to the left) to enlarge the map. | The map can be adjusted to fill the screen. |
| World Map |  |
| Action | Note |
| Click the World tab at the top of the screen. | When opened, the map displays political boundaries and country names. |
| Use the slider bar to zoom in to see smaller countries. |  |
| Click "select a country" and choose the following countries: Vietnam, Turkey, Angola, and Chile. | The map zooms to the selected country. |
| Line Tool |  |
| Action | Note |
| Under the View menu, check capitals, major cities, and lakes and rivers. | Country names, country borders, oceans and seas, and latitude/longitude are selected by default. Un-check items to turn those features off. |
| Use the slider bar (to the left) to enlarge the Chile map. |  |
| Under the Draw Tools, select a color. Then click the Line Tool | Remember to first choose a color and then select the Line Tool to draw from point to point. |
| Use the Line Tool to draw a triangle from the capital of Chile to the capitals of Argentina and Paraguay. |  |
| Change the line's position by dragging points to new locations. |  |
| Place your cursor over the triangle you drew. Click the X in the Delete box that appears. | Clicking the X deletes the entire triangle. |

Interactive Tool Guide

| Text Tool | Notion |
| :--- | :--- |
| Click the Europe tab and zoom in to fill the screen. | You can move the map and enlarge it to focus <br> on particular countries. |
| Under the View menu, de-select country names. | Students can turn off country names to <br> practice identifying individual countries. |
| Using the Draw Tools, select a color. Then select the <br> Text Tool T. Click on France and label the country. |  |
| Follow the same process to label Spain, Germany, <br> England, Italy, Poland, and Ukraine. Experiment with <br> different colors. |  |
| Saving Your Map $\quad$ Action | Only the part of the map that is visible on the <br> screen will be saved when you save, print, or <br> e-mail. |
| Click Save, Print, E-Mail to preserve your work. |  |
| Enter your name, class, and a map title. | Work is not saved within the atlas. Controls at <br> the top of the PDF allow students to save, <br> print, or e-mail their work. |
| Click Create PDF. |  |
| Map Library | Note |
| Click Map Library (top right) to view pre-made maps. | Each selection provides access to a number <br> of different maps. |
| Select United States from the pull-down menu. | Controls at the top of the map window allow <br> you to save, print, or e-mail. |
| Scroll down and select the U.S. Expansion map. |  |

Interactive Tool Guide
Spanish
Future \& Conditional Structures

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "future tense." | Resource types are indicated in the search results. |
| Select Future \& Conditional Structures (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. Printable materials are accessible there. The rubric may be used to assess the final written assignment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Home Page |  |
| Action | Note |
| Read the introduction. | The tool provides materials for Level I (beginning), Level II (intermediate), and Level III (advanced). <br> The levels contain the same content. However, the grammar points and the pedagogical support (translation, difficulty of questions) vary. |
| Click Quick Tour (bottom left) for a short explanation of how to use this tool. |  |
| Select preparación or choose a level, which will take you to información. | Preparación serves as assessment for level placement. Students may skip preparación and select a level. |
| Preparación |  |
| Action | Note |
| Review the image provided. |  |
| Click continue to answer eight multiple-choice questions. |  |
| Throughout the lesson, click on Monica to review directions. | Click continue to close the directions and return to the questions. |
| After answering all eight questions, click continue to go to the next section. | A level is determined based on the number of correct responses. |
| Información |  |
| Action | Note |
| Read the directions. | There are four tabs that provide information: escuchar, explorar, entender, and gramática (bottom left). <br> These sections may be viewed in any order. |
| Select the escuchar tab and click play to view and listen to the video. | Video controls (play, pause, stop, and scroll) and the on/off buttons for captions are provided. |

Interactive Tool Guide

| Select explorar and follow the directions. | Level-appropriate tool tips in explorar and entender aid reading comprehension. |
| :---: | :---: |
| Select entender to review the video script. | Students can read the script while playing the video. |
| Click gramática for a review of the use and form of the grammar point (future and conditional structures). Then close the gramática window. | For all levels, this grammar tutorial is in English, with examples in Spanish. |
| Click continue to answer a series of ten multiple-choice questions (pregunta) based on the grammar point and content. | For Levels I and II, feedback for each response selection is provided in English. For Level III, Spanish feedback is provided. |
| After answering all of the questions, click continue to go to the next section. |  |
| Situación |  |
| Action | Note |
| Review the directions. |  |
| Review the asignación. | For Levels I and II, the assignment is given in English. For Level III, the assignment is given in Spanish. |
| Use the writing pad to create a response to the assignment. Use the accented letters where needed. |  |
| Click continue for support materials. |  |
| Review criterio and respuestas. | Criterio is a checklist that allows students to self-assess their work. <br> Respuestas lists the questions and correct answers from información; these can serve as model responses for the writing assignment. |
| Select escribir to view strategies for writing. After you review this information, close the escribir window. | The writing tutorial is provided in English. |
| Select save/print. Enter name and select sections to save or print. Click OK. | The Print and Save buttons appear at the top of the assignment window. Browser controls may be used to e-mail the assignment to the teacher, to the student's e-mail account, etc. <br> Or, students can save the assignment and then attach it to an e-mail. |

Interactive Tool Guide
Spanish
El Tango de Argentina (Understanding Pronouns)

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for pronouns. | Resource types are indicated in the search results. |
| Select EI Tango de Argentina: Understanding pronouns (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and read all sections. | In particular, review Assessment. Printable materials are accessible there. The rubric may be used to assess the final written assignment. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Welcome Screen |  |
| Action | Note |
| Read the introduction. | The tool provides materials for Level I (beginning), Level II (intermediate), and Level III (advanced). <br> The levels contain the same content. However, the grammar points and the pedagogical support (translation, difficulty of questions) vary. |
| Click Quick Tour (bottom left) for a short explanation of how to use this tool. |  |
| Select preparación or choose a level. | Preparación serves as assessment for level placement. Students may skip preparación and select a level. |
| Preparación |  |
| Action | Note |
| Review the image provided. |  |
| Click continue to answer eight multiple-choice questions. |  |
| After answering all eight questions, click continue to go to the next section. | A level is determined based on the number of correct responses. |
| Información |  |
| Action | Note |
| Click Información. |  |
| Read the directions. | There are two sections that provide information: escuchar and explorar. <br> Vocabulario and gramática provide support. |

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| In escuchar, click play to view and listen to the video. | Video controls (play, pause, stop, and scroll) are provided. Click text to display the video text. <br> Click ${ }^{\hat{\wedge}}$ to slide up the text display panel. This functionality allows students to read the script while playing the video. Tool tips aid reading comprehension. |
| :---: | :---: |
| Select explorar and follow the directions. | Use the arrow keys on your computer's keyboard to explore Argentina. Again, tool tips aid reading comprehension. |
| Click gramática for a review of the use and form of the grammar point (pronouns). Then close the gramática window. | The tutorials are presented in English with examples in Spanish. They are level specific and are divided into two parts, Use and Form. |
| Click vocabulario to review terms found in the content. Close this window. | The vocabulary list includes nouns and verbs. |
| Select a set of questions and click continue. | There are two sets of ten questions, Práctica gramatical (grammar point) and Práctica comprensiva (reading comprehension). <br> Feedback for incorrect choices is offered in English for Levels I and II. For Level III, feedback is in Spanish. |
| After answering a set of questions, follow the directions. | Students may continue to the next section, Situación, or choose to answer the other set of questions. |
| As an option, select save, print or e-mail (top-right corner) before moving to the next section. | Students have the options to save, print, or email their work after Información or Situación. |
| Situación |  |
| Action | Note |
| Review the directions. |  |
| Review the Asignación. | For Levels I and II, the assignment is given in English. For Level III, the assignment is given in Spanish. |
| Review Criterio. | This checklist allows students to self-assess their work. |
| Use the character pad to create a response to the assignment. Use the accented letters where needed. |  |
| Click vocabulario or gramática for support materials. |  |
| Select escribir to view strategies for writing. After you review this information, close the escribir window. | The writing tutorial is provided in English. |
| Select save, print or e-mail. Enter name and select sections to save, print, or e-mail. Click OK. | Students who choose to e-mail their work are advised to save or print their work as well. |

Interactive Tool Guide
Spanish
Spanish Language Builder: Verbs

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for verbs. | Resource types are indicated in the search results. |
| Select Spanish Language Builder: Verbs (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. |
| Select the Lesson Guide (available at the top of the resource window) and skim the Objectives and Assessment. | Offers detailed information about the intended use of the Spanish Language Builder. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Welcome Screen |  |
| Action | Note |
| Review the Welcome Page. |  |
| Click Quick Tour (bottom right) for a short explanation of how to use this tool. |  |
| Enter your name and click Go. |  |
| Select a Module |  |
| Action | Note |
| Click "Select a module" to see a listing of grammar points (in English). | Each module relates to a particular grammar point and topic. |
| Mouse over the grammar point to view the available topics (in Spanish). | Topics or titles describe the content for the modules. |
| Select Present Regular: Soy Sam. |  |
| Read the Directions and click OK. | Directions remain accessible throughout student use of the tool (via the question mark). |
| Picture \& Monologue |  |
| Action | Note |
| Examine the picture. |  |
| Click the Play button to listen to the monologue. | Volume controls are provided. |
| Click Script to read the monologue. | Students can read the script as they listen. <br> English translations are provided for highlighted words and phrases. |

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| Practice | Action |
| :--- | :--- |
| Answer a series of five multiple-choice questions based <br> on the grammar point and topic. | For incorrect selections, feedback is provided. |
| After entering a correct answer, click <br> audio; then click Continue. | to listen to the |
| After answering all five questions, click Continue. | Use the arrows to review your answers. <br> Practice does not have to be completed to may choose to Practice Again. <br> start Quiz. |
| Quiz | $\quad$ Notion |
| Select the Quiz tab. | Audio is provided for each question. <br> Form a sentence by dragging one item (from <br> each column) to the corresponding answer <br> box. <br> At any time, use the arrows to review your <br> selections. |
| Answer the five drag-and-drop questions, which are <br> based on the grammar point and topic. | Before submitting a quiz, you may review <br> Practice questions. |
| After answering all five questions, click Submit to grade <br> the quiz. | Once you submit your quiz, it can only be <br> reviewed in Save, Print, E-mail. It is no longer <br> available in the Select-a-module menu. |
| Review your Quiz Results; then click OK. | Students should complete this step before <br> closing the tool. Otherwise, they will lose their <br> work. |
| Select a new module (from the pull-down menu) or click <br> Save, Print, E-mail to create a PDF of your quiz results. |  |
| Enter an e-mail address and click Send. |  |
| Or click the menu icons to save or print the quiz results. |  |

Interactive Tool Guide
Spanish
Spanish Writing Tablet

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for writing. | Resource types are indicated in the search results. |
| Select Spanish Writing Tablet (interactive tool) from the available resources. | Clicking a title within the search results launches the resource in a new tab or window. <br> This tool offers four templates for writing and allows students to demonstrate their written skills. |
| Select the Lesson Guide (available at the top of the resource window) and skim all sections. | In particular, review the Sample Writing Assignments. |
| Click Share to view the Assign Feature. | Provides directions for student access to the resource. Teachers can add instructions, if desired, and distribute to classes. |
| Welcome Screen |  |
| Action | Note |
| Read the introduction. |  |
| Click Quick Tour (middle of the screen) for a short explanation of how to use this tool. |  |
| Click Start. |  |
| Blank Form |  |
| Action | Note |
| Use the Choose-a-form menu to view the various writing templates. | The Blank form displays automatically. Other options include Letter, Invitation, and Conversation. <br> The forms may be selected in any order. |
| Select Blank. |  |
| Enter sample text in the blank form. | The Spanish characters can be used to include accented letters. <br> Clear Form will delete work for that particular form. |
| Letter Form |  |
| Action | Note |
| Select Letter from the Choose-a-form menu. | Work is automatically saved when moving between forms. <br> Click on Save, Print, E-mail at any time to view work in progress. |
| Enter text for provided fields (date and names). | These fields are optional. If left blank, they will not print. |

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| Select a greeting using the Choose-a-greeting menu. |  |
| :--- | :--- |
| Enter sample text in the body of the letter. |  |
| Select a closing using the Choose-a-closing menu. | Click Save, Print, E-mail to view work in <br> progress. |
| Invitation Form Action |  |
| Note |  |
| Select Invitation from the Choose-a-form menu. |  |
| Enter sample text in the designated fields. |  |
| Conversation Form $\quad$ Action |  |
| Select Conversation from the Choose-a-form menu. |  |
| Choose the number of speakers. | This field is optional. If left blank, it will not <br> print. |
| Enter each speaker's name and click Continue. | Use the Delete Row and Add Row features to <br> modify the number of conversational <br> exchanges. |
| Enter a title for the conversation. |  |
| Choose a name and enter sample text. |  |
| Save, Print, E-mail |  |
| Select Save, Print, E-mail. |  |
| Enter your name and class. | View the results for all the forms you have <br> completed. |
| Click Create PDF. | Students should complete this step before <br> closing the tool. Otherwise, they will lose their <br> work. |
| Enter an e-mail address and click Send. <br> Or click the menu icons to save or print the quiz results. |  |

Interactive Tool Guide
Elementary
Reading Records

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Search for "reading." | Resource types are indicated in the search results. |
| Select Reading Records (interactive tool) from the available resources. | Clicking a title within the search results launches the resources in a new tab or window. <br> Note Reading Records is available as both a Web app and an iOS app (iPad only). https://itunes.apple.com/us/app/sas-readingrecords/id808342057?mt=8 |
| Select the Lesson Guide (available at the top of the resource window) and skim all sections. | In particular, review Objectives and Assessment. |
| Click Start Demo. | A sample class appears in the work space. <br> Teachers can populate a class using the + student button on the main dashboard, or students can join a class using the class code (displayed below the class drop down box at the top of the screen). |
| Big Picture |  |
| Action | Note |
| Take a look at the main Dashboard tab. Click on Timmy Student. | Clicking on an individual student's name opens the student profile. <br> Here, you will see additional data about the student including reading level history, incomplete assignments, completed assignments, and visual reports of the student's data. Reports can be exported and saved as PDFs or printed. |
| Click < Students to go back to the main dashboard. |  |
| Click Reports. | The Reports view provides an aggregated class report for analyzing data at the class level. |


| Click the Assignments tab. Take a look around and then click Assignment 2. | The Assignments tab provides a log of previous assignments and additional details about individual assignments. <br> Clicking on an individual assignment opens the assignment profile. <br> Here, you will see additional data about the assignment including assignment attributes, student(s') progress, and visual reports of the assignment data. |
| :---: | :---: |
| Click < Assignments to go back to the main Assignments tab. |  |
| Click the Grading tab. | The Grading tab functions like a to-do list. Here, all of the assignments that have been submitted but not graded populate the Assignments To Be Graded table. |
| Click the Library tab. | The Library tab lists all the reading passages available for assignments. Note the wide range of passage types (Fiction/Nonfiction, Poetry, English/Spanish, Lexile Measure). <br> Additional passages can be added manually by clicking the Create Your Own Reading button. |
| Click Going to the Store. | Clicking on an individual title opens additional details about the reading. <br> Here, you can see how the passage is displayed to the student, the multiple-choice and open-ended quiz associated with this passage, and the retell prompt. <br> Note: multiple-choice questions, open-ended questions, and the retell prompt can be edited to fit your needs. The passage text of SAS Reading Records-provided passages cannot be edited. |
| Click < Library to go back to the main Library tab. |  |
| Creating an Assignment |  |
| Action | Note |
| Click the Assignments tab and click Create Assignment. |  |


| Select all students. | Assignments can be assigned to 1 , all, or a subset of your students. |
| :---: | :---: |
| Enter the Assignment Title: Assignment Demo, select the readings: Going to the Store (300L), Mary Loves Birds (350L), and The Fox and the Cat (360L), and click Next. | To change the reading level (Lexile) range of the passages, click, hold and move the markers on the number line. <br> To sort the passages, use the drop down box. <br> To delete a previously-selected passage, click the passage, and click the trashcan icon. <br> Selecting more than one passage allows students to choose which passage they want to read. |
| Select a due date, and make sure Retell, Multiple- Choice, and Open-Ended are selected. Add the comment, "Good luck!" Click Assign. | Use the check boxes to select which comprehension assessments should be attached to the assignment. |
| Taking an Assignment |  |
| Action | Note |
| Click the Dashboard tab and click Johnny Student. |  |
| Click the Read Now button in the row next to Assignment Demo to launch the assignment. | Alternatively, students can login to SAS Reading Records using their individual SAS Curriculum Pathways student accounts. There, the assignment will show up on the main dashboard. Taking an assignment via the student profile (teacher interface) or student dashboard (student interface) functions in the same way. |
| Follow the instructions to complete the assignment. |  |
| Grading an Assignment |  |
| Action | Note |
| Click the Grading tab. |  |
| Click Assignment Demo. |  |
| Click the Play button to listen to your recording. | The entire recording of the student's reading is provided. However, if the student pauses or makes extraneous comments before or after reading the passage, the green and blue markers are available to trim the recording. Notice as you trim the recording, the Words Correct Per Minute (WCPM) statistic updates automatically. |


| Click a word in the text, mark it as a substitution, and <br> enter in the word with which it was substituted. Also, <br> check the box next to meaning to indicate the behavior <br> was due to a meaning cue. | Note how the statistics in the table update <br> automatically. <br> Follow the same process for marking <br> other reading behaviors. |
| :--- | :--- |
| Click the Fluency tab. | The student record is provided on the Fluency <br> tab for reference. |
| Answer the questions and give a score for <br> fluency. | Note the multiple-choice quiz is graded <br> automatically. |
| Repeat the step above for open-ended questions and <br> retell. | Click the ? icon for guidance about increasing <br> and decreasing students' reading levels based <br> on assignment performance. |
| Click Finished. | Submits a read-only copy to the student and <br> adds the completed assignment to the student <br> profile. |
| Click Done. |  |
| Finish | To view or edit the graded assignment, <br> navigate to the student profile, scroll down to <br> the Completed Assignments table, and click <br> on the assignment name. |
|  |  |

## Interactive Tool Guide <br> Mathematics <br> Math Stretch

| Preparation |  |
| :---: | :---: |
| Action | Note |
| Download SAS Math Stretch from the App Store or Google Play. | App Store https://itunes.apple.com/app/id607137453 <br> Google Play https://play.google.com/store/apps/details?id=com .sas.android.mathstretch <br> The system requirements include iOS7 and Android 4.0.3. |
| Getting Started |  |
| Action | Note |
| Tap? | Provides general information about Math Stretch and highlights the features. <br> Tap anywhere to exit. |
| Tap i. | Provides more information about the App, link to a Support Site, Rate \& Review, and Contact Us. |
| Tap Done. |  |
| Scroll through the activities. | Some activities include practice and/or quiz modes, while others may be used as manipulatives. |
| Activities |  |
| Action | Note |
| Select Number Comparison. | Currently, you are in Practice mode. Select the appropriate sign for comparing the two numbers. <br> You will receive instant feedback. If the answer is correct a green $\checkmark$ will appear and you can continue. If the answer is incorrect a red $x$ will appear and you can try again. |
| Tap Settings. Select a Number Type and a Number Range, and then tap Done. Work through additional questions. | Settings are available for both Practice and Quiz modes. |
| Tap My Session. | Shows the correctly completed questions. These results can then be emailed. Tap Cancel to exit. |
| Tap Quiz. | The quiz is immediately started. Default quiz settings will be used unless otherwise changed. <br> After answering each question, Quiz Results will appear and display the number of correctly answered questions and the time to complete. The results can then be emailed. |
| Tap Home and select Math Drag-And-Drop. | Create a number by dragging the blocks into the box. The activity can be used as a manipulative to help students visually create numbers. |


|  |  |
| :--- | :--- |
| Action | Click Reset to clear the box area. |
| Tap Home. | Note |
| Tap My Badges to view your achievements. | Click each activity to see the badges earned for <br> completed practice questions. |

## Learner Preferences/Levels English Language Arts

Students bring a variety of learning preferences and levels to the English language arts classroom. To address these differences, teachers can use lessons and activities from SAS Curriculum Pathways. By incorporating these resources, teachers ensure that they use multiple instructional approaches in the classroom. Teachers can easily tailor a lesson to suit individual student needs. The following table lists seven English language arts resources and the learner preferences and levels for which they are particularly well-suited. You may wish to consider these categories as you explore additional resources.

|  | Visual Learner | Auditory Learner | Experiential Learner | Independent Learner | Collaborator | $\begin{array}{\|c\|} \hline \text { Avid } \\ \text { Reader } \end{array}$ | Reluctant Reader | Math- <br> Challenged <br> Students | $\begin{array}{c\|} \hline \text { ESL } \\ \text { Students } \end{array}$ | Academically Gifted Students |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inquiry: Pronoun Usage QL \#129 |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |
| Inquiry: Active Reading QL \#126 |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |
| Web Lesson: Character Development in The Glass Menagerie QL \#1065 |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| Audio <br> Tutorial: <br> Who is Julia Alvarez? QL \#1272 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |
| Web Lesson: Exploring Homer's Odyssey QL \#360 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  | $\sqrt{ }$ |
| Audio <br> Tutorial: <br> Needless <br> Phrases <br> QL \#1334 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\sqrt{ }$ |  |  |  |
| Reading Records app OL \#8007 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\sqrt{ }$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |

See Learner Preferences/Levels: Definitions for information on how these resources were categorized and for descriptions of learner preferences/levels and the characteristics of lessons that address each.

## Learner Preferences/Levels Mathematics

Students bring a variety of learning preferences and levels to the math classroom. To address these differences, teachers can use lessons and activities from SAS Curriculum Pathways. By incorporating its resources, teachers ensure that multiple instructional approaches are utilized in the classroom. If needed, teachers can easily tailor a lesson to suit individual student needs. The following table lists seven mathematics resources and the learner preferences and levels for which they are particularly well-suited. You may wish to consider these categories as you explore additional resources.

|  | Visual Learner | Auditory Learner | $\begin{array}{\|c\|} \hline \text { Experiential } \\ \text { Learner } \end{array}$ | $\begin{array}{c\|} \hline \text { Independent } \\ \text { Learner } \end{array}$ | Collaborator |  | $\begin{aligned} & \text { Reluctant } \\ & \text { Reader } \end{aligned}$ | Math- <br> Challenged <br> Students | $\begin{array}{\|c\|c\|} \hline \text { ESL } \\ \text { Students } \end{array}$ | $\begin{array}{\|c\|} \hline \text { Academically } \\ \text { Gifted } \\ \text { Students } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Web Lesson: Cryptography QL \#488 | $\checkmark$ |  | $\checkmark$ |  | $\sqrt{ }$ | $\checkmark$ |  |  |  | $\sqrt{ }$ |
| Flash Cards: Decimals QL \#1393 | $\checkmark$ |  | $\sqrt{ }$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Web Lesson: Towers of Hanoi QL \#503 | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Audio <br> Tutorial: <br> Pythagorean Theorem QL \#1351 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |
| Inquiry: <br> Intersecting <br> Parallel <br> Lines: <br> Perspective in Art <br> QL \#106 | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
| Inquiry: Beyond the Correlation Coefficient QL \#120 | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |
| Math Stretch app QL \#8004 | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  | $\sqrt{ }$ |  | $\sqrt{ }$ |

See Learner Preferences/Levels: Definitions for information on how these resources were categorized and for descriptions of learner preferences/levels and the characteristics of lessons that address each.

## Learner Preferences/Levels Science

Students bring a variety of learning preferences and levels to the science classroom. To address these differences, teachers can use lessons and activities from SAS Curriculum Pathways. By incorporating its resources, teachers ensure that multiple instructional approaches are utilized in the classroom. If needed, teachers can easily tailor a lesson to suit individual student needs. The following table lists seven science resources and the learner preferences and levels for which they are particularly well-suited. You may wish to consider these categories as your explore additional resources.

|  | $\begin{array}{\|l\|l\|} \hline \\ \text { Visual } \\ \text { Learre } \end{array}$ | $\begin{array}{\|l\|} \hline \text { Auditory } \\ \text { Learner } \end{array}$ | Experiential Learner | $\begin{gathered} \text { Independent } \\ \text { Learner } \end{gathered}$ | Collaborator | $\begin{gathered} \text { Avid } \\ \text { Reader } \end{gathered}$ | Reluctant <br> Reader | $\begin{array}{\|c\|} \hline \text { Math- } \\ \hline \text { Challenged } \\ \text { Students } \end{array}$ | $\begin{array}{\|c\|c\|} \hline \text { ESL } \\ \text { Students } \end{array}$ | $\begin{array}{\|c\|} \hline \text { Academically } \\ \text { Gifted } \\ \text { Students } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Web Lesson: <br> Reaction Rates <br> QL \#446 | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  | $\sqrt{ }$ |
| Audio <br> Tutorial: <br> Fetal <br> Development <br> QL \#1283 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
| Web Lesson: Natural Selection QL \#983 |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |
| Inquiry: Reaction Coordinate Diagrams QL \#64 | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Web Lesson: <br> Lab: <br> Detecting <br> Motion <br> QL \#275 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |
| Audio <br> Tutorial: <br> The Immune System QL \#1281 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
| Reach for the Stars iBook QL \#8008 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |

See Learner Preferences/Levels: Definitions for information on how these resources were categorized and for descriptions of learner preferences/levels and the characteristics of lessons that address each.

## Learner Preferences/Levels <br> Social Studies

Students bring a variety of learning preferences and levels to the social studies classroom. To address these differences, teachers can use lessons and activities from SAS Curriculum Pathways. By incorporating its resources, teachers ensure that multiple instructional approaches are utilized in the classroom. If needed, teachers can easily tailor a lesson to suit individual student needs. The following table lists seven social studies resources and the learner preferences and levels for which they are particularly well-suited. You may wish to consider these categories as you explore additional resources.

|  | $\begin{array}{\|l\|} \hline \text { Visual } \\ \text { Learner } \\ \hline \end{array}$ | Auditory Learner | Experiential Learner | Independent <br> Learner | Collaborator | $\begin{array}{\|c\|} \hline \text { Avid } \\ \text { Reader } \end{array}$ | $\begin{array}{\|l\|} \hline \text { Reluctant } \\ \text { Reader } \end{array}$ | Math- <br> Challenged <br> Students | $\begin{array}{\|c\|} \hline \text { ESL } \\ \text { Students } \end{array}$ | Academically Gifted Students |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Web Lesson: Prehistoric Cave Art QL \#578 | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
| Web Lesson: African Kingdoms: The Dilemma Tale QL \#378 |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| Inquiry: <br> Renaissance Art: Influence of Math and Science QL \#185 | $\checkmark$ |  | $\checkmark$ | $\sqrt{ }$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Audio Tutorial: OPEC Oil Embargo QL \#1299 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
| Web Lesson: News Reports on Westward Expansion QL \#609 | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |
| Web Lesson: NGOs and Humanitarian Relief QL \#415 | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\sqrt{ }$ | $\checkmark$ |
| Interactive Tool: Interactive Atlas QL \#2000 | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  |  | $\sqrt{ }$ | $\sqrt{ }$ |

See Learner Preferences/Levels: Definitions for information on how these resources were categorized and for descriptions of learner preferences/levels and the characteristics of lessons that address each.

## Learner Preferences/Levels Spanish

Students bring a variety of learning preferences and levels to the Spanish classroom. To address these differences, teachers can use lessons and activities from SAS Curriculum Pathways. By incorporating its resources, teachers ensure that multiple instructional approaches are utilized in the classroom. If needed, teachers can easily tailor a lesson to suit individual student needs. The following table lists six Spanish resources and the learner preferences and levels for which they are particularly well-suited. You may wish to consider these categories as you explore additional resources.

|  | Visual Learner | Auditory Learner | Experiential Learner | Independent Learner | Collaborator | Avid <br> Reader | Reluctant Reader | Math- <br> Challenged <br> Students | $\begin{gathered} \text { ESL } \\ \text { Students } \end{gathered}$ | Academically Gifted Students |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inquiry: Comparing Versions of Las meninas QL \#218 | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Web Lesson: The Enlightened Snoop QL \#628 |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |
| Audio <br> Tutorial: <br> Regular -ar <br> Verbs <br> QL\#1305 | $\checkmark$ | $\sqrt{ }$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |
| Inquiry: <br> The Panama Canal? <br> QL \#230 | $\checkmark$ |  | $\sqrt{ }$ | $\sqrt{ }$ |  | $\sqrt{ }$ |  |  | $\sqrt{ }$ |  |
| Web Lesson: Mexican Presidents QL \#429 |  |  |  | $\checkmark$ |  |  | $\sqrt{ }$ |  | $\checkmark$ |  |
| Web Lesson: Finales for El delantal blanco QL \#1165 |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  | $\sqrt{ }$ | $\checkmark$ |

See Learner Preferences/Levels: Definitions for information on how these resources were categorized and for descriptions of learner preferences/levels and the characteristics of lessons that address each.

## Learner Preferences/Levels <br> Definitions

The Visual Learner learns best when information is presented visually. Lessons and activities well-suited to this preference may involve reading, note-taking, interpreting pictures or diagrams, viewing demonstrations, or using graphic organizers.

The Auditory Learner learns best when information is presented orally. Lessons and activities well-suited to this preference may involve group discussions, interviews, or student presentations.

The Experiential (Kinesthetic) Learner learns best by doing. Lessons and activities well-suited to this preference may involve small group discussions, lab work, model-building, role play, peer teaching, or student demonstrations.

The Independent Learner learns best when working individually. Lessons and activities wellsuited to this preference may involve independent study, self-paced instruction, or individual (rather than group) projects.

The Collaborator learns best through sharing and cooperating. Lessons and activities well-suited to this preference may involve group discussions or projects.

The Avid Reader enjoys reading and is often a visual learner. Lessons and activities well-suited to this level may involve reading, note-taking, debates, panel discussions, or developing realworld models.

The Reluctant Reader does not enjoy reading, may find it difficult, and is often an auditory learner. Lessons and activities well-suited to this level may involve listening to passages, reading illustrated text, or producing creative projects (skits, models, drawings, etc.).

Math-Challenged Students find math difficult and do not enjoy (and sometimes fear) it. Lessons and activities well-suited to this level may involve developing conceptual understanding before mathematical understanding, representing formulas or concepts through visual means (graphs, maps, etc.), using simplified mathematical procedures, or problem-solving in small groups.

ESL Students must work to process subject matter information before they can develop understanding. Lessons and activities well-suited to this level may utilize visual or experiential approaches and may involve a focus on vocabulary, small group discussions, cooperative learning, or oral assessments.

Academically Gifted Students possess a wide variety of gifts and may be avid readers and/or good problem-solvers. Lessons and activities well-suited to this level may involve in-depth exploration, extension activities, abstract thinking, thematic approaches, or opportunities for selfpacing.

## Guided Resource Exploration

Teachers need time to find, examine, and evaluate SAS Curriculum Pathways resources. The first step in this process is finding resources that have the potential to meet their instructional needs. Our search-driven interface enables teachers to find topic-specific resources. Standards provide a means of finding resources that address specific state or Common Core State Standards.

Complete this guided exploration exercise for a discipline of your choosing.

1. English Language Arts You are working on an upcoming literature unit and plan to focus on the works of Edgar Allan Poe. Identify two resources that you could potentially incorporate into this unit.

| SAS Curriculum Pathways Resource 1 |  |
| ---: | ---: |
| Revel: |  |
| Resource Title: |  |
| Quick Launch \#: |  |
| Level: |  |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |

2. Mathematics As an algebra teacher, you have found few materials addressing complex roots. Relying on drill-and-practice textbook exercises has proven ineffective in conveying this abstract concept to your students. This year, you hope to take a new approach. Identify two resources that you could potentially incorporate into this unit.

| SAS Curriculum Pathways Resource 1 |  |
| ---: | ---: |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |
| Level: |  |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |

3. Science A major focus of your district's chemistry curriculum is atomic theory. You have developed some effective lesson plans and demonstrations, but need more resources to address the concept of atomic spectra. Identify two resources that you could potentially incorporate into this unit.

| SAS Curriculum Pathways Resource 1 |  |
| ---: | ---: |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |
| Level: |  |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |

4. Social Studies Your U.S. History classes will soon begin studying the mid-twentieth century. You are in need of additional materials dealing with the Cold War. Identify two resources that you could potentially incorporate into this unit.

| SAS Curriculum Pathways Resource 1 |  |
| ---: | ---: |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |
| Level: |  |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |

5. Spanish As a new teacher, you are working to develop a resource and materials file for your Spanish classes, as all you were handed at the beginning of the school year was a textbook and student workbook. For the next unit, focusing on the use of familiar commands, identify two resources you could potentially incorporate.

|  | SAS Curriculum Pathways Resource 1 |
| ---: | ---: |
| Level: |  |
| Resource Title: |  |
| Quick Launch \#: |  |
| Level: |  |
| Resource Title: |  |
| Resource Type: |  |
| Quick Launch \#: |  |

## Identifying, Evaluating, and Implementing Resources

Now that you have an understanding of SAS Curriculum Pathways resources and features, it's time to consider how you might use these resources to meet your specific instructional goals. In this exercise, focus on one of the courses you teach. Explore SAS Curriculum Pathways to

1. identify a resource you can utilize in that course
2. evaluate the resource (work through the exercises as a student would)
3. develop an implementation strategy

## Course Information

Title/Description:

What are the characteristics of students who take this course?

What are some of the challenges you face in teaching this course content?

Resource Identification

| Resource title: |  |  |  |
| :--- | :--- | :--- | :--- |
| Resource type (circle one): |  |  |  |
| App | Audio Tutorial | Course Resource | Inquiry |
| Interactive <br> Tool | Tool-based Lesson | Video | Web |
|  |  | Lesson |  |
| Quick Launch \#: |  |  |  |
|  |  |  |  |

## Identifying, Evaluating, and Implementing Resources

## Resource Evaluation

Which specific unit of study will this resource support?

Describe how this resource would help you meet your unit goals and objectives.

Resource Implementation
How would you use this resource? What modifications would you make (if any) to meet your students' instructional needs?

How would you assign this resource to your students?

Predict how your students would respond and questions they might raise (based on your evaluation of the resource).
-Session Notes -


[^0]:    Once you have completed your scavenger hunt, go to www.sascurriculumpathways.com/trainingAnswers to check your work

