

Learning Conductor Parent Guide

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What is Conductor?

Conductor is a web-based tool that helps students prepare for the math section of their exam. Using Conductor, students can:

- Take Readiness Tests to find out strengths and weaknesses and identify the topics that should be studied further.
- Take Practice Sessions to get unlimited practice on weak areas, with problems that are similar to the problems on the real exam.
- Get immediate feedback on work, including worked-out examples explaining exactly how to solve each problem.
- See a Progress Report showing progress toward excelling on the exam.
- Take a Rehearsal test to see how they would do on the real exam.

How does Conductor help students prepare for their exam?

Conductor has different content areas to help students succeed on their exam. As they work through these areas, Conductor assesses strengths and weaknesses, and then leads students to the topics and subtopics on which they need more work. When students have succeeded on a subtopic by scoring 75% or higher, Conductor marks their status as “Ready”. If they still need some more practice, Conductor assigns a status of “Not Ready”. A Progress Report shows the student’s status for each subtopic, and their progress toward succeeding on the real exam.

When students have achieved a “Ready” status on 90% or more of the subtopics, Conductor makes available a Rehearsal test as a final step in the student’s studies.

Conductor’s content areas are as follows:

- **Readiness Tests**
The Readiness Tests assess a student’s knowledge of each topic and subtopic contained on the exam. There is one Readiness Test for each topic, with three to five problems per subtopic. Based on the results of these tests, Conductor identifies the topics and subtopics in which the student is strong and those on which more practice is needed. It is recommended that students begin their studies with the Readiness Tests.
- **Practice Sessions**
The Practice Sessions help students focus on the subtopics where they are having trouble. They are able to work through an unlimited number of dynamically generated problem sets, with ten unique problems per set. Each problem provides a detailed explanation of the solution, including showing the worked-out problem. When a score of 75% or higher is achieved on a Practice Session, Conductor sets the status for that subtopic to “Ready”.
- **Rehearsal Test**
The Rehearsal Test is a full-length test containing 80 problems covering all of the topics and subtopics on the real exam. If students get a cumulative score of 75% or higher on the Rehearsal, they have mastered Conductor. If they score less than 75%, then they see a results screen showing them the exact subtopics in which they are not quite ready. They can do more Practice Sessions for these subtopics until they are prepared to try again. When they try again, a Mini Rehearsal Test assesses their readiness on the subtopics in which they were not quite ready when they took the full-length Rehearsal Test.

- **Progress Reports**
The Progress Report gives students a picture of how they are progressing toward being ready for their exam. It shows them the topics and subtopics in which they have excelled and those in which they need more practice. It also allows students to start a Readiness Test or Practice Session directly from the report, by simply clicking a button.

What makes Conductor better than other programs?

When studying for an exam, you want students to spend their time as effectively as possible, in the areas where they need the most work. Conductor not only allows them to do this, but its features help them focus their efforts and provide them with guided instruction to further enhance learning. Among the features that make Conductor a more effective study tool are:

- Dynamic problem generation
- Geometrically correct mathematical representations
- Worked-out examples
- Study guidance

Dynamic Problem Generation

Many computer-based assessment products use a predetermined set of problems. The set of problems is presented to every student, many times in a predetermined order. This results in every student seeing the same set of problems – potentially multiple times as they repeat their work to gain proficiency.

Conductor, however, uses a problem generator that utilizes templates based on publically released test items for the exam being studied and a parameterization algorithm to generate up to 100 problems for each template. These templates and problems form the problem pool used by Conductor. As a result of this very large pool, Conductor is capable of creating a unique problem set for each student, every time the student needs it. In addition, because the templates are based on publically released test items, the parametrically generated problems are not only unique, but they are highly analogous to questions found on the real exam.

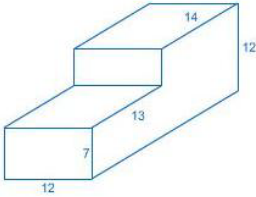
Thus, with Conductor, students are able to work on problems sets containing problems they have not seen before, and they can be assured that the problems they are mastering are comparable to those they will encounter on the real exam. This results in an engaging and confidence-building learning environment.

Geometrically Correct Mathematical Representations

Many problems that students will encounter on their exam require a problem-specific representation in order to solve the problem. A sample of this type of problem is shown in Figure 1.

Question 1 of 1

What is the surface area of the figure below? The figure is not drawn to scale. All the lengths are measured in yards.



A. 2,268 yd²

B. 3,888 yd²

C. 1,454 yd²

D. 727 yd²

Figure 1 - Sample Problem-Specific Representation

As shown in the sample, the problem statement is accompanied by a problem-specific representation. It is important that this representation be geometrically correct so that students can better visualize the problem. If you notice in the sample shown, each line dimension is correct relative to the other dimensions. All the portrayed dimensions are accurate with respect to each other. This allows students to see the problem as precisely as possible.

Furthermore, as the specifics of problems change when new problem sets are generated, the representation also changes. Each new representation shows dimensions that are geometrically accurate. The ability to dynamically create these kinds of geometrically accurate mathematical representations is unique to Conductor.

Worked-out Solutions

Providing step-by-step solutions to problems is an integral part of what Conductor offers students. They are provided with detailed feedback for each problem, regardless of whether or not it was answered correctly. This use of carefully crafted, sequential explanations about how to solve problems has been shown to be more effective in helping students gain math proficiency than traditional methods of instruction (cf. Atkinson, Derry, Renkl, & Wortham, 2000; Atkinson, Renkl, & Merrill, 2003; Gerjets, Scheiter, & Catrambone, 2006; Große & Renkl, 2006). A sample worked-out solution is shown in Figure 2.

The area indicated by Square 1 is the problem statement and answer area (with the correct answer and distractors). In this example, a problem-specific representation is included with the problem statement.

The area indicated by Square 2 is displayed after the student answers the question. It shows whether or not the student correctly answered the problem and the correct answer. The correct answer is shown even if the student answered correctly.

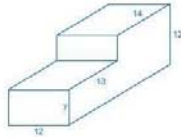
The area indicated by Square 3 is the worked-out solution for the problem. It is shown in conjunction with the correct answer. The solution is provided in discrete steps, with each step showing the strategy and computations needed to solve the problem.

In cases where the problem includes a representation, that representation is used as part of the worked-out solution. As with the problem-specific representation, the representations used in the solution are also geometrically correct, and are presented in such a way as to help the student envision the steps and strategy needed to solve the problem. In this case, applying their knowledge of standard area calculations to irregularly shaped figures composed of rectangles.

In addition to using the problem's representation as part of the worked-out solution, Conductor also uses dynamically generated solution-specific representations to assist students in visualizing the problem and to broaden their conceptual understanding.

Question 1 of 1

What is the surface area of the figure below? The figure is not drawn to scale. All the lengths are measured in yards.



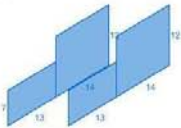
A. 2,268 yd^2
 B. 3,888 yd^2
 C. 1,454 yd^2
 D. 727 yd^2

Incorrect.

The correct answer is:
 C) 1,454 yd^2


To find the surface area of the figure, you need to find the area of all the sides, the top, the bottom, the front, and the back of the figure.

First find the area of the two sides:



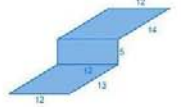
Area of 13 by 7 rectangle = $13 \cdot 7 = 91 \text{ yd}^2$
 Area of 14 by 12 rectangle = $14 \cdot 12 = 168 \text{ yd}^2$
 Area of 1 side = $91 + 168 = 259 \text{ yd}^2$
 Area of 2 sides = $2 \cdot 259 = 518 \text{ yd}^2$

Then find the area of the front and back:



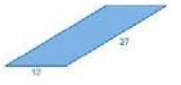
Area of 12 by 7 rectangle = $12 \cdot 7 = 84 \text{ yd}^2$
 Area of 12 by 12 rectangle = $12 \cdot 12 = 144 \text{ yd}^2$
 Area of front and back = $84 + 144 = 228 \text{ yd}^2$

Now, find the area of the top:



Area of 12 by 13 rectangle = $13 \cdot 12 = 156 \text{ yd}^2$
 Area of 12 by 5 rectangle = $12 \cdot 5 = 60 \text{ yd}^2$
 Area of 12 by 14 rectangle = $12 \cdot 14 = 168 \text{ yd}^2$
 Area of top = $156 + 60 + 168 = 384 \text{ yd}^2$

Finally, find the area of the bottom:



Area of bottom = $12 \cdot 27 = 324 \text{ yd}^2$

So, to find the surface area, add all these areas.

Surface Area = $518 + 228 + 384 + 324 = 1,454 \text{ yd}^2$

Figure 2 - Sample Worked-out Example

Study Guidance

Unlike many online study aids that provide students with problems to solve but no real guidance as to how best to utilize the available material, Conductor uses the student's own results on both assessments and practice sessions to guide them to the topics where additional work is needed.

Through the activation and inactivation of navigation buttons, students are led through Readiness Tests to assess their strengths and weaknesses and then through Practice Sessions to focus on the areas where they need extra work. Topics in which students have shown proficiency are not recommended for study, thus allowing them to spend their time more efficiently.

In addition, Conductor provides students with a status of "Ready" or "Not Ready" for each topic and subtopic on the exam. This allows them to see their progress toward being prepared to take the real exam, and to know exactly the areas on which they need additional practice. A sample student readiness status screen is shown in Figure 3; its features are described below.

Readiness Status			
Topic / Subtopic	Status	Math Tips	Next Step
[-] Number Sense	Not Ready		[-]
Operations with Integers and Decimals	Ready	--	None. Way to go!
Factors and Fractions	Ready	--	None. Awesome!
Exponents	Not Ready	View	Take Practice Session
Percents	Ready	--	None. Good for you!
[+] Statistics, Data Analysis, and Probability	Not Ready		[+]
Algebra and Functions	Unknown		Take Readiness Test
Measurement and Geometry	Unknown		Take Readiness Test
Algebra I	Unknown		Take Readiness Test

Figure 3 - Sample Readiness Status

1. Topics/Subtopics: contains a row for each topic and subtopic on the exam. Click the '[+]' or '[-]' symbols to show or hide subtopics.
2. Status: shows the student's readiness status for each subtopic. The status can be one of the following values:
 - Ready – for a subtopic, this means a score of 75% or higher was earned on that subtopic. For a topic this means that a score of 75% or higher was earned on 90% or more of that topic's subtopics.
 - Not Ready – for a subtopic, this means a score less than 75% was earned for that subtopic. For a topic this means that a score of 75% or higher was not earned on 90% or more of that topic's subtopics.
 - In Progress – this means that a Practice Session was saved and has not been scored.
 - Unknown – this means that no work has been done for the topic.

3. Math Tips: allows students to review basic concepts for their weak subtopics.
NOTE Acrobat® Reader® is needed to view the math tips.
4. Next Step: provides students with specific guidance as to what they need to do next for that subtopic.

With this type of directed guidance, students can quickly determine what to do next and how much work is needed to get ready for their exam.

How do I use Conductor Administration?

Logging into Conductor

Use the following steps to start Conductor and log in.

1. Make sure you have your User Name and your Password. If you don't, see the person who set up your Conductor account for you.
2. In your browser go to <http://conductor.dlworkshop.net> .
NOTE If you receive a notice about upgrading your Flash Player, follow the directions on the screen.
3. On the log-in page, enter your **User Name** and **Password**. Then, click **Login**. You'll be taken to the Conductor main administration page, shown in Figure 4. From this page, you can see a summary of the subscriptions you have purchased, and navigate to each of the Conductor administration features.



Conductor

Welcome Janice Litvin. You have the following current subscriptions:

Product Name	Grade Level	Subscription Type	Available Subscriptions
CAHSEE	--	1 Year	7
STAR	5	One Month Boot Camp	1

What would you like to do?

Create New Students	Edit My Profile Information
Reports - View & Email	View Conductor Resources
Add or Renew Subscriptions	Reset Passwords
Logout	

Figure 4 - Main Administration Page

Creating New Students

Students must be registered and associated with a test before they can begin using Conductor. Use the steps below to create new Conductor student users and associate them with an exam.

NOTE You can create new students only as long as there are available subscriptions for the exam with which you are associating the student.

1. On the Conductor main administration page, click **Create New Students**.

Conductor - Create Student User

To create a new student, please complete the information below. Then, click Create.

*First Name: *Last Name:

City: *State: School Name:

*User Name (Login): *E-mail:

*Password: *Confirm Password:

*What test will this student user be taking?

There are 10 available subscriptions for this test.

* required field

Figure 5 - Create New Students screen

2. On the Create Student User page (shown in Figure 5), enter the requested information into the text boxes.

NOTE Students have the ability to change their own password. We suggest that you create a temporary password, and then have students change it when they first login to Conductor.

3. From the test drop-down list, select the **name of the test** for which the student is preparing.

NOTE Only the tests for which you have available subscriptions are shown in this list.

4. Click **Create**.

5. On the confirmation screen, verify that the student's information is correct. Then, click **OK**. The student is registered in the Conductor system and can begin work immediately.

Viewing Progress Reports

Progress reports are an integral part of your being able to monitor student progress. Conductor provides a Progress Report showing achievement at both a summary level and a detailed level. The Summary Progress Report shows status for all topics and subtopics. The Detailed Progress Report shows results for all work in a selected subtopic. You can view a student's Progress Report for up to 30 days after the student's subscription expires.

To view a student's progress report, use the steps below.

1. On the Conductor main administration page, click **Reports – View & Email**.

Conductor - Reports

View Progress Report

Select the name of the user for whom you want to view a Progress Report and the name of the test for which to view the report. Then, click View Progress Report.

Student Name: <Select>

Test for which to view report: <Select>

View Progress Report

Weekly Report Email Option

Check the box next to a test name to receive a weekly Progress Report email for that test. You will receive one email containing a report for each of your students working on the test.

Send me a weekly Progress Report email for:

CAHSEE

Change Weekly Email Option

Done

Figure 6 - Reports screen

2. On the Reports screen (shown in Figure 6), in the View Progress Report area, select the **student's name** from the Student Name drop-down list.
3. In the test drop-down list, select the **name of the test** for which you want to view a report.
NOTE Only those tests with which the student is associated are shown in the list. If the selected student is associated with only one test, the name of that test is pre-selected.
4. Click **View Progress Report**. The Progress Report for the selected student and test displays.
NOTE You can see a sample report and information about the report contents in the *Reviewing and Interpreting Progress Reports* section.
5. When you are finished viewing the report, click **Done** to return to the Reports screen.

Reviewing and Interpreting Summary Progress Reports

The Progress Summary Report shows how a student is progressing toward being ready for the exam. It shows the student's status for each subtopic, and recommendations as to the next step for subtopics in which the student needs more work. A sample report is shown in Figure 7.

Understanding Your Report

Progress Reports pertain to individual subtopics (there are no reports for topics).

Click **View** in the Summary table below to see your progress over time for a given subtopic.

Progress Summary			
Topic/Subtopic	Status	Recommendation	Full Report
Number Sense		--	
Operations with Integers and Decimals	Ready	--	<input type="button" value="View"/>
Factors and Fractions	Not Ready	Take Practice Session	<input type="button" value="View"/>
Exponents	Not Ready	Take Practice Session	<input type="button" value="View"/>
Percents	Ready	--	<input type="button" value="View"/>
Statistics, Data Analysis, and Probability		--	
Tables, Graphs and Charts	Ready	--	<input type="button" value="View"/>
Measures of Center	Not Ready	Take Practice Session	<input type="button" value="View"/>
Probability	Ready	--	<input type="button" value="View"/>
Algebra and Functions		Take Readiness Test	
Variables and Expressions	Unknown	--	<input type="button" value="View"/>

1

2

3

4

Figure 7 - Sample Progress Summary Report

- Topic/Subtopic: contains a row for each topic and subtopic.
- Status: shows the student's readiness status for each subtopic. The status can be one of the following values:
 - Ready – for a subtopic, this means a score of 75% or higher was earned on that subtopic. For a topic this means that a score of 75% or higher was earned on 90% or more of that topic's subtopics.
 - Not Ready – for a subtopic, this means a score less than 75% was earned for that subtopic. For a topic this means that a score of 75% or higher was not earned on 90% or more of that topic's subtopics.
 - In Progress – this means that a Practice Session was saved and has not been scored.
 - Unknown – this means that no work has been done for the topic.
- Recommendation: provides directions as to what should be done next for each topic or subtopic. If there is a "Ready" status for a subtopic or topic, no recommendation is shown. If the student is ready in 90% or more of the subtopics, an "all topics ready" row appears at the top of the report.

NOTE The student version of this report allows a Readiness Test or Practice Session to be started directly from the report.
- Full Report: provides access to a Detailed Progress Report for that subtopic by clicking View.

Reviewing and Interpreting Detailed Progress Reports

The Detailed Progress Report shows student results for a specific subtopic. A sample of the Detailed Progress Report is shown in Figure 8.

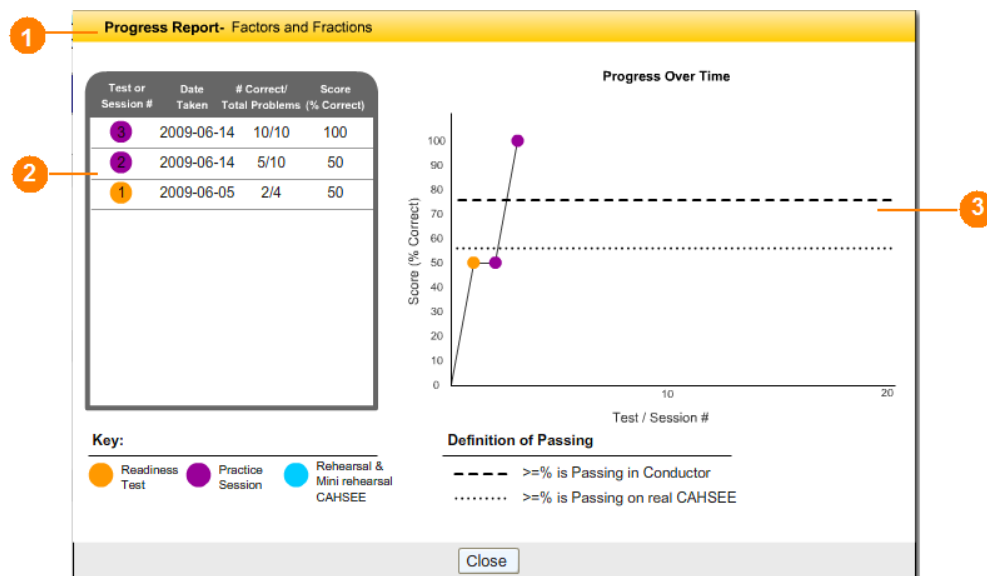


Figure 8 - Sample Detailed Progress Report

1. Subtopic: shows the name of the subtopic covered by the report.
2. Sessions: lists the student’s results for all the Readiness Tests, Practice Sessions, and Rehearsal tests completed for the subtopic. The results are color-coded and shown with the newest result at the top of the list.
3. Progress Chart: shows results across the sessions completed for the subtopic. The dot for each session number is color-coded, and it corresponds to a result shown in the Sessions area.

Getting a Weekly Report Automatically

If desired, you can set up Conductor to send you a Progress Summary Report automatically each week. To do this, use the steps below.

NOTE Once a student’s subscription expires, you will no longer receive weekly report emails. However, you can continue to login to Conductor and view the student’s Progress Report for up to 30 days after the subscription expiration date.

1. On the Conductor main administration page, click **Reports – View & Email**.

Conductor - Reports

View Progress Report

Select the name of the user for whom you want to view a Progress Report and the name of the test for which to view the report. Then, click View Progress Report.

Student Name:

Test for which to view report:

Weekly Report Email Option

Check the box next to a test name to receive a weekly Progress Report email for that test. You will receive one email containing a report for each of your students working on the test.

Send me a weekly Progress Report email for:

CAHSEE

Figure 9 - Reports screen

2. On the Reports screen (shown in Figure 9), in the Weekly Report Email Option area, check the box next to the name of each test for which you want a weekly report.

NOTE To stop receiving weekly reports, click the box to remove the check mark.

3. Click **Change Weekly Email Option**.

Editing Your Profile Information

1. On the Conductor main administration page, click **Edit Profile Information**.

Conductor - Edit Profile

First Name: Mildred e-mail: keith@sls.com
Last Name: Jackson Logon Name: trial55

Change Name
First Name: Last Name:

Change e-mail
e-mail:

Change Password
New Password: Confirm Password:

Figure 10 - Edit Profile Information

2. On the Edit Profile screen (shown in Figure 10), use the **First Name** and **Last Name** text boxes to make changes to your name. Then, click **Change Name**.
3. Use the **e-mail** text box to enter your new e-mail address. Then, click **Change e-mail**.
4. Use the **Password** text boxes to enter your new password. Then, click **Change Password**.

NOTE Your password appears as dots.

5. When you are finished, click **Done**.

Resetting Passwords

Use the steps below to reset a student's password.

1. On the Conductor main administration page, click **Reset Passwords**.



Figure 11 - Reset Password screen

2. On the Reset Password screen (shown in Figure 11), in the User Name drop-down list, select the **name of the user** for whom you want to reset a password.
3. In the Password boxes, enter the **new password**.
 - NOTE** Your password appears as dots.
 - NOTE** Students have the ability to change their own password. We suggest that you create a temporary password, and then have students change it when they first login to Conductor.
4. Click **Reset Password**.

Managing Subscriptions

There are two ways in which you can manage your Conductor subscriptions – renew/extend existing subscriptions or purchase new subscriptions. Use the steps in the sections below to perform either of these functions.

Renew/Extend Existing Subscriptions

1. On the Conductor main administration page, click **Add or Renew Subscriptions**.
2. On the Subscriptions screen, in the Renew Existing Subscriptions section (shown in Figure 12), click **Renew** next to the name of the product you wish to renew.

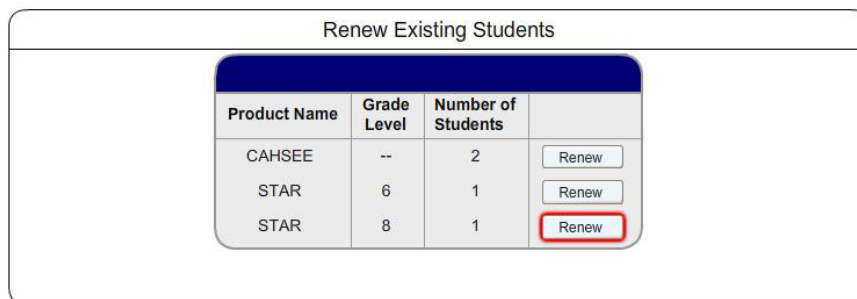



Figure 12 - Renew Existing Subscriptions

3. On the Renewal Selections screen (shown in Figure 13) check the box next to the **name of each student** for whom you want to renew or extend a subscription.

 Conductor - Subscriptions

Check the box next to the name of each student for whom you would like to renew a CAHSEE subscription.

Renew	Student Name	Purchase Date	Subscription End Date
<input type="checkbox"/>	BernieGifford	05/12/2009	05/12/2010
<input type="checkbox"/>	DougPepper	05/14/2009	05/14/2010
<input type="checkbox"/>	PattiConstantakis	05/20/2009	05/20/2010

Please select how long you would like to extend your CAHSEE subscription. NOTE: You can only renew one subscription type at a time.

- One Month Boot Camp (\$24.99)
- 3 Months (\$39.99)
- 1 Year (\$79.99)

Figure 13 - Renewal Selections

- At the bottom of the screen, select the **duration** for which you want to extend the subscription.
- NOTE** You can only select one subscription duration value at a time. If you want the selected students to have access to Conductor for different lengths of time, you will need to do their renewals separately.
- Click **Renew** to begin the checkout process.


Purchase New Subscriptions

- On the Conductor main administration page, click **Add or Renew Subscriptions**.
- On the Subscriptions screen, in the Add New Subscriptions section (shown in Figure 14), find the name of the product for which you wish to purchase a subscription.

Add New Subscriptions			
Product Name	Grade Level	Subscription Type	
STAR	5	<Select>	<input type="button" value="Subscribe"/>
STAR	6	<Select>	<input type="button" value="Subscribe"/>
STAR	7	One Month Boot Camp (\$24.99)	<input type="button" value="Subscribe"/>
STAR	8	3 Months (\$39.99)	<input type="button" value="Subscribe"/>
		1 Year (\$79.99)	<input type="button" value="Subscribe"/>

Figure 14 - Add New Subscriptions

- In the Subscription Type drop-down list, select the **type of subscription** you want to purchase.
- NOTE** The types of subscriptions available may vary for each product.
- Next to the selected subscription type, click **Subscribe**.
- On the Subscription Confirmation screen (shown in Figure 15), enter the number of subscriptions you would like to purchase and select whether or not you would like to receive a weekly Progress Report via email.



Conductor - Subscriptions

Please complete the information below. Click Google Checkout to continue.
If you don't want to subscribe, click Cancel.

*Number of subscriptions:

Send me a weekly Progress Report. [What's This?](#)

First Name: Mildred Last Name: Jackson
City: null School Name: null
User Name (Login): trial55 Email: keith@sls.com

Are you a student or parent? Parent

Subscription Type: STAR One Month Boot Camp (24.99/subscription)
STAR grade level: 6

* required field



Fast checkout: through Google

Figure 15 - Add Subscription Confirmation

6. Click **Checkout** to complete your purchase.