Tutorial Six: Using steps to show progression of work

The Step Workspace allows students to show and explain each step as they progress through a math project. Because their work is preserved and duplicated as they move from one step to the next, you can see what their thinking process was and pinpoint any mistakes.

Students can use any one of the five Kidspiration Math Tools with steps, but can only use one tool per project. In this lesson, you will learn to create a new project in the Step Workspace using the Kidspiration Color Tiles™ Math Tool. For specific information on how to use all five of the Math Tools, refer to Chapter 4, Tutorials 1-5.

Starting Kidspiration

To start Kidspiration on a Macintosh:

• Open the **Kidspiration 3** folder and double-click the **Kidspiration** icon.
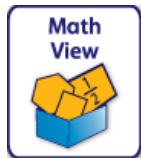
The Kidspiration Starter opens.

To start Kidspiration in Windows:
• Click the **Start** button, point to **Programs** and click **Kidspiration 3**.

The Kidspiration Starter opens.

The Kidspiration Starter is the place where you start new projects, open existing projects and use the many different Kidspiration activities. You will begin by clicking the **Math View** button to open the Math Tool Starter.

Starting a new Kidspiration Color Tiles project using steps

To start a new Kidspiration Color Tiles project using steps, check the **Use Step**s checkbox in the **Math Tool Starter** and then click the **Color Tiles** button.
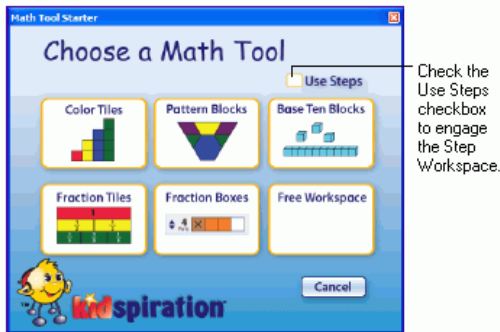
A new step workspace opens in the Kidspiration Color Tiles Math Tool, with Step 1 active and ready for you to begin your project. As you proceed, you may add as many steps as you like, but only two will be showing on the screen at any given time. The active step has a white background and the inactive steps are grey.

Adding your name to a project

1. On the **Math** toolbar, click the **Student Name** button .

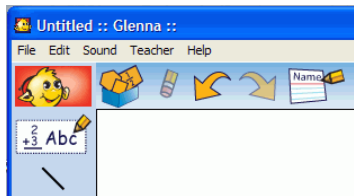2. Type your name in the box where indicated.

   For the examples in this tutorial we will use the name "Glenna."

3. To choose where you want the name to appear on the page, select **Left, Center** or **Right**.

   A preview of how the name will appear on the page is displayed in the box on the right side of the dialog box.

4. Click **OK**.

The student name appears in the title bar of the document.

Saving your work

1. On the **File** menu, click **Save**.

2. In the folder list, click the folder where you want to save the project.

3. Type a name for the project, and then click **Save**.

Kidspiration suggests the name "Glenna" based on the student name, but you can use a different name.

Setting up your project

Adding a Math Text Box

Math Text Boxes allow students to describe their work with words, numbers and math notation, including structured frames for writing fractions, division problems and vertical math notations. Math Text Boxes also allow teachers to place instructions and helpful text in projects.

1. Click the **Math Text Box** in the **Math palette** and drag it into Step 1, positioning it at the top and center of the workspace.

2. Type **Show and explain your work for every step!** into the Math Text Box.

3. Click outside the box and then back on it to select it. When a text box is selected, it has corner handles .

4. Click and drag on the corner handles to resize the box so that all of the text fits on one line at the top and center of the workspace.

5. Drag another text box out and place it below the first one.

6. Type the following problem into the text box:

    Andrew, Claire and Matt split 12 cookies equally. Matt gave 2 cookies to Claire and then Claire gave half of her cookies to Andrew. How many cookies do they have now?

7. Decrease the text size by clicking the **Resize Text** button on the **Bottom** toolbar twice.

8. Click outside the box and then back on it to resize the text box so that the text fits on two lines, positioned below the first text box.

    Note: If you make a mistake in your work, you have several options on the Math toolbar:

    *   You can delete an item by selecting it and clicking the **Clear** button on the **Math** toolbar.

        –or–

    *   You can undo up to the last eight changes in your project by clicking the **Undo** button on the **Math** toolbar.

        –or–

    *   You can redo up to the last eight changes you used the **Undo** button to undo by clicking the **Red**o button on the **Math** toolbar.

Adding a Math SuperGrouper to your project

Math SuperGroupers are similar to the SuperGroupers in Kidspiration's Picture View. They are used for grouping, sorting, categorizing and counting activities.

1. Click and drag a rectangular **Math SuperGrouper** from the **Math palette** onto the blank workspace.

2. Click on one of its handles to resize it so that it fits below the text boxes and on the left side of the workspace, and takes up about 1/4 of the workspace from left to right.

## Duplicating items on the workspace

You will use a Math SuperGrouper to represent each person in this word problem. Because you want three Math SuperGroupers which are about the same size and shape, you can use Copy and Paste options to create two more of them on the workspace.

1. Select **Copy** from the **Edit** menu and then click on an area of open workspace to the right of the first grouper.

2. Click **Paste** on the **Edit** menu. Move your cursor to another area of open workspace and click **Paste** again.

3. Position the groupers in a row from left to right across the page.

4. Now add another text box to the right of the groupers and resize it so it is square and takes up the remaining space on the right side of the workspace.

   You will add information to this text box later.

Labeling Math SuperGroupers

1. Notice that when you have a grouper selected, a label box appears in dotted lines at the top.
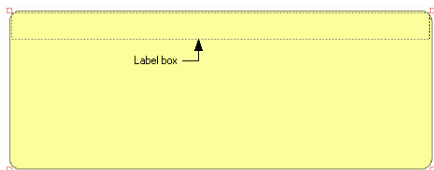
2. Double-click inside the first grouper's label box to select it and a cursor will appear.

3. Type **Andrew**, and then select the label in second grouper and type **Claire**. Type **Matt** into the third one.

Your project should look something like this:
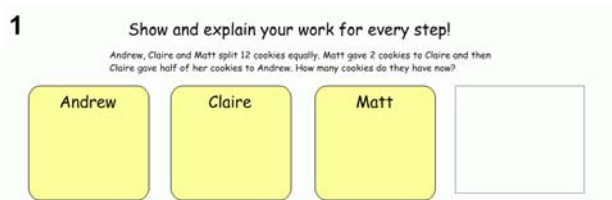
Locking items on the workspace

Now that Step 1 is set up, you can lock its contents so that they cannot be moved or deleted.

1. First you'll need to multi-select the three Math SuperGroupers by holding down the **Shift** key and clicking each of them.

   Tip: You can also turn Shift-select on, which allows you to select multiple items on the workspace without holding down the Shift key. Click the **Shift-select** button on the **Bottom** toolbar to turn Shift-select on or off. The Shift-select button appears on Math View's Bottom toolbar when **Stylus Mode** is checked in **Application Options** on the **Teacher** menu.

Note: The Teacher menu must be enabled in order to access *Application Options*. To turn the Teacher menu on or off, click **Enable Teacher Menu** on the **Teacher** menu. You can create a password for the Teacher menu to prevent students from using it and changing teacher preferences.

- On the **Teacher** menu, click **Application Options**.
- Select the **Password Enabled** check box.
- Click **Set Password**.

  The Set Password dialog box appears.

- Type the password you want to use in the **Enter Password** box.
- Type the password again in the **Confirm Password** box, and then click **OK**.
- When you enable the Teacher menu, you will be prompted to enter your password.

  Note: If you forget your password, you can access the Teacher menu by using the password "Kidspiration3."

2. With the groupers selected, click **Locked Item** on the **Teacher** menu.

   A checkmark appears next to *Locked Item* when the groupers are locked, and the corner handles change.

   Notes:

   - The Teacher menu must be enabled for the *Locked Item* option to appear. To turn the Teacher menu on or off, click **Enable Teacher Menu** on the **Teacher** menu.

   - If you choose the *Locked Step* option from the Teacher menu, it would preserve Step 1 but it would not allow students to add to the step in any way. Nor would any of your work so far transfer to subsequent steps. Be aware that this option exists.

3. Repeat the above to lock the three Math Text Boxes in Step 1 as well.

Duplication options for Math Text Boxes in steps

When you add a step in the Step Workspace, your previous work is duplicated in the new one. However, by default, Math Text Boxes do not duplicate. In this project, since it will help if you can continue to see the problem in Step 2, we will change the default setting for specific Math Text Boxes.

1. Click to select the text box where you have written the problem beginning with *Andrew…*.

2. Select **Math Text Box in Next Step** on the **Teacher** menu and choose **Duplicate With Contents**.

Since you will be explaining your work in the empty box in each step, you want the box itself to appear in each new step, but without transferring the contents from the previous step.

• Select the empty text box and select **Math Text Box in Next Step** on the **Teacher** menu and choose **Duplicate Without Contents**.

Step 1: Solving the problem

Add color tiles to Step 1 to begin solving the problem.
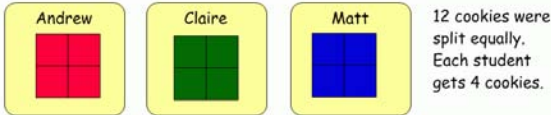
1. Click the red color tile in the **Math palette** and drag it into the first grouper.

2. Click on the red color tile again in the **Math palette** to create three more in the grouper. Notice that if they are moved close enough, that they will "snap" together.

3. Repeat these steps to finish splitting the "12 cookies." Add four green color tiles to the second grouper and four blue color tiles to the third one.

   You have now represented the first part of the word problem.

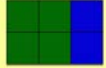4. Describe what you did in the blank text box on the right:

Step 2

1. Click the **Add Step** button ![icon] on the **Math** toolbar and add Step 2. Notice what gets duplicated based on the settings you chose in Step 1.

2. Now represent the next part of the problem by multi-selecting two of Matt's blue color tiles and dragging them into Claire's grouper. You may need to resize the groupers to make everything fit.

3. Describe what you did in the blank text box on the right:

Step 3

1. Click the **Add Step** button on the **Math** toolbar again and add Step 3.

2. Now represent the final step in the problem by multi-selecting three of Claire's blue color tiles and dragging them into Andrew's grouper. You may need to resize the groupers to make everything fit.

3. Describe what you did in the blank text box on the right. You may need to move the text box containing the problem to make everything fit. You can also resize text and make your text box containing the answer smaller.

Step 3 of your project should look something like this:

Deleting and navigating between steps

If you add another step by accident, you can delete it. Note that you can only delete the last step at any time from a math project in the Step Workspace.

1. Add a 4th step to your project.

2. To delete it, click the **Delete Step** button on the **Math** toolbar.

3. You will be prompted to confirm that you want to delete the step. Click **Yes** to proceed.

4. You can repeat this process to delete multiple steps.

   Note: If you accidentally delete a step, you can click the **Undo** button on the **Math** toolbar to undo up to your last eight changes.

5. To navigate through your steps, click the **Go to Previous Step** and **Go to Next Step** buttons on the **Math** toolbar.

Printing your project

To print a project, click **Print** on the **File** menu.

You can also choose from the following options before printing:

Selecting page orientation
In Math View, landscape orientation is the default. To switch to portrait orientation before printing a project:

1. On the **File** menu, click **Page Setup**.

2. Next to **Orientation**, click the **Portrait** or **Landscape** icon (Macintosh).

   –or–

   Under **Orientation**, select **Portrait** or **Landscape** (Windows).

Selecting paper size
Letter is the default paper size in Kidspiration. To select a different paper size:

1. On the **File** menu, click **Page Setup**.

2. In the **Paper** list, select the paper size you want (Macintosh).

   –or–

3. Under **Paper**, select the paper size you want in the **Size** list (Windows).

Printing page numbers

If you choose to print page numbers, they will appear at the bottom of the page. To print page numbers:

1. Click the **Student Nam**e button.

2. Select the check box where indicated.

Closing your project and returning to the Kidspiration Starter

Congratulations! You have completed *Tutorial Six: Using steps to show progression of work*. To close your project and return to the **Kidspiration Starter**, click the **Go to Starter** button.

When you return to the Kidspiration Starter, you are prompted to save the open project. Click **Yes** if you want to save the project.