

Sorting

Last Modified on 04/26/2016 11:20 am EDT

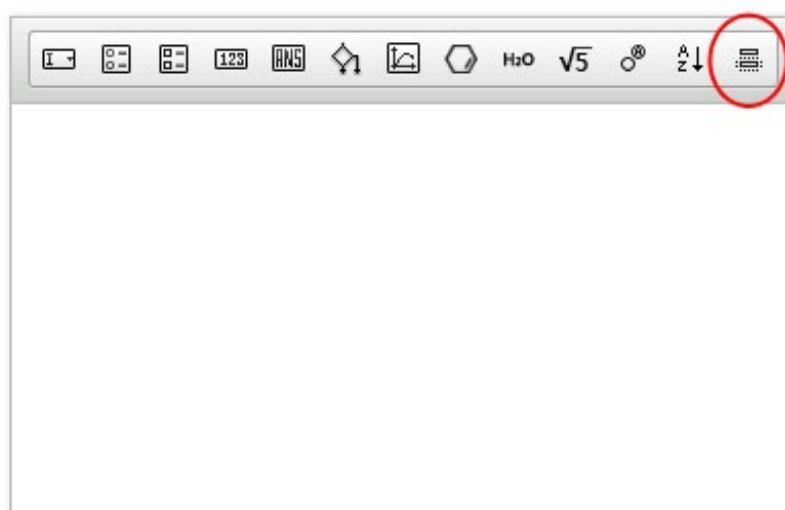
The Sorting Module is used to create questions in which images or words are sorted into different categories.

Hide All Answers

Getting Started

1. To insert the Sorting Module in to the Question Text section, click the sorting button in the Question Type Palette. The symbol on this button is two rectangles.

Question Text*



2. Once inserted into the Question text section, the module will always appear as a list of items and two categories, as exemplified in the screenshot below:

Question Text*

The screenshot shows a web-based editor for creating a sorting question. At the top is a toolbar with various icons for text formatting and symbols. Below the toolbar, the editor is divided into two main sections: 'Items' and 'Categories'. The 'Items' section contains four buttons labeled 'Item1', 'Item2', 'Item3', and 'Item4'. The 'Categories' section contains two columns: 'Category One' and 'Category Two'. Under 'Category One' are buttons for 'Item1' and 'Item3'. Under 'Category Two' is a button for 'Item2'.

3. To open the Sorting Module editor, double click on the module.

The Sorting Module Editor consists of two tabs: Question/Answer tab, in which authors create the categories and the items that students will sort, as well as set the question's answer by correctly sorting the items; and the Feedback tab, in which authors can write feedback that the student sees depending on how she sorts the items.

The Sorting Module Editor also has a Save button, which you can use to save your work and exit the module, and a Cancel button, which will allow you to exit the module without saving.

Please note that the system will not allow you to save the module unless an answer has been programmed into the Question/Answer tab. Also, once you hit the Save button, the module will close.

Setting Up the Question

Set up for Sorting questions occurs on the Question/Answer tab, where you can create your categories and items, and tell the system how they are correctly sorted.

You can sort either text items or image items into categories; however, you can only sort one or the other, not both.

Creating Text Items

To set up a question in which students sort text items, do the following:

1. Open the Sorting Module Editor. When prompted whether you want to sort images or text, select "Text."

Sorting	Question/Answer	Feedback
<p>Choose your item format</p> <div><div>image</div><div>or</div><div>text</div></div>		
<div>Save</div> <div>Cancel</div>		<input checked="" type="checkbox"/> Scramble answer choices

2. Under the field that says “Categories,” create the categories you would like to sort items into. You can add categories by clicking on the button with the plus sign.

Sorting Question/Answer Feedback

Items

B I U x₂ x^a f_x Ω ↕

+

Categories

+

Literary figures

Monarchs

Add Category Label

Click on the X to delete this category

Click here to create categories

Type the name of your category here

Save Cancel

☒ Scramble answer choices

- a. Type your category's name into the editable text field at the top of the category bucket. The text field has the words "Add Category Label" in it. Category names are limited to 23 characters.
 - b. There is no limit to the number of categories you can add; however, check with your editor for best practices.
 - c. Delete categories by moving your cursor over the right-hand corner of the category, where an X will appear. Click on the X to delete the category.
3. Under the section that says "Items," begin creating the items you want students to sort.

Sorting

Question/Answer

Feedback

Items

Formatting Toolbar

B

I

U

x_2

x^2

f_x

Ω

\int

Disraeli

Type your items here

+

Click here to upload your item

Successfully uploaded items appear here

Victor

Arnold

Wilde

Click here to delete your item

Categories

+

Literary figures

Monarchs

Add Category Label

Save

Cancel

☒ Scramble answer choices

- Type your text item into the editable text field.
- Above each editable text field, there is a Formatting Toolbar. From left to right, the Formatting Toolbar allows you to do the following:



- Bold text
 - Italicize text
 - Underline text
 - Add a subscript
 - Add a superscript
 - Insert a mathematical equation
 - Insert a special character
 - Insert an algorithmic variable (for an in-depth look at algorithmic variables, please refer to the Algo documentation)
- Click on the + button underneath the editable text field to upload your text item. Successfully uploaded text items will appear to the right of the editable text

field.

- d. To delete uploaded items, move your mouse over the item you would like to delete so that an X appears in the top right hand corner. Click on the X to permanently remove the item.
- e. There is no cap to the number of items you may add. However, check with your editor for best practices.

4. If desired, you can edit the labels students see for Items and Categories. In this example, we will edit the labels so that they read “People” (for items), and “Occupations” for categories.

The screenshot displays a software interface for editing a module. At the top, there are three tabs: 'Sorting', 'Question/Answer', and 'Feedback'. The 'Sorting' tab is currently selected. Below the tabs, there is a section for editing item labels. A red box highlights a text field containing the word 'People', with a red arrow pointing to it and the text 'Editable text field'. Below this text field is a list of names: Disraeli, Gladstone, Peel, Arnold, Wilde, and Victoria. Below the list of names is another red box highlighting a text field containing the word 'Occupations', also with a red arrow and the text 'Editable text field'. Below the 'Occupations' text field is a grid of three boxes labeled 'Literary figures', 'Monarchs', and 'Prime Ministers'. At the bottom of the interface, there are 'Save' and 'Cancel' buttons, and a checkbox labeled 'Scramble answer choices' which is checked.

5. Determine if you want the system to randomize the items students see, so that the items appear in a different order every time a student opens up the question. To randomize items, check “Scramble answer choices” in the bottom right hand corner of the module editor.

Sorting

Question/Answer

Feedback

People

B

I

U

x₂

x²

f_x

Ω

↕

+

Disraeli

Gladstone

Peel

Arnold

Wilde

Victoria

Occupations

+

Literary figures

Monarchs

Prime Ministers

Save

Cancel

☒ Scramble answer choices

Creating Image Items

To set up a question in which students sort image items, do the following:

1. Open the Sorting Module Editor. When prompted whether you want to sort images or text, select “Image.”

Sorting

Question/Answer

Feedback

Choose your item format

image

or

text

Save

Cancel

☒ Scramble answer choices

- Under the field that says “Categories,” create the categories you would like to sort items into. You can add categories by clicking on the button with the plus sign.

Sorting

Question/Answer

Feedback

Items

+

Type the name of your category here

Click here to delete this category

Categories

+

Literary figures

Monarchs

Prime Ministers

Click here to create categories

Save

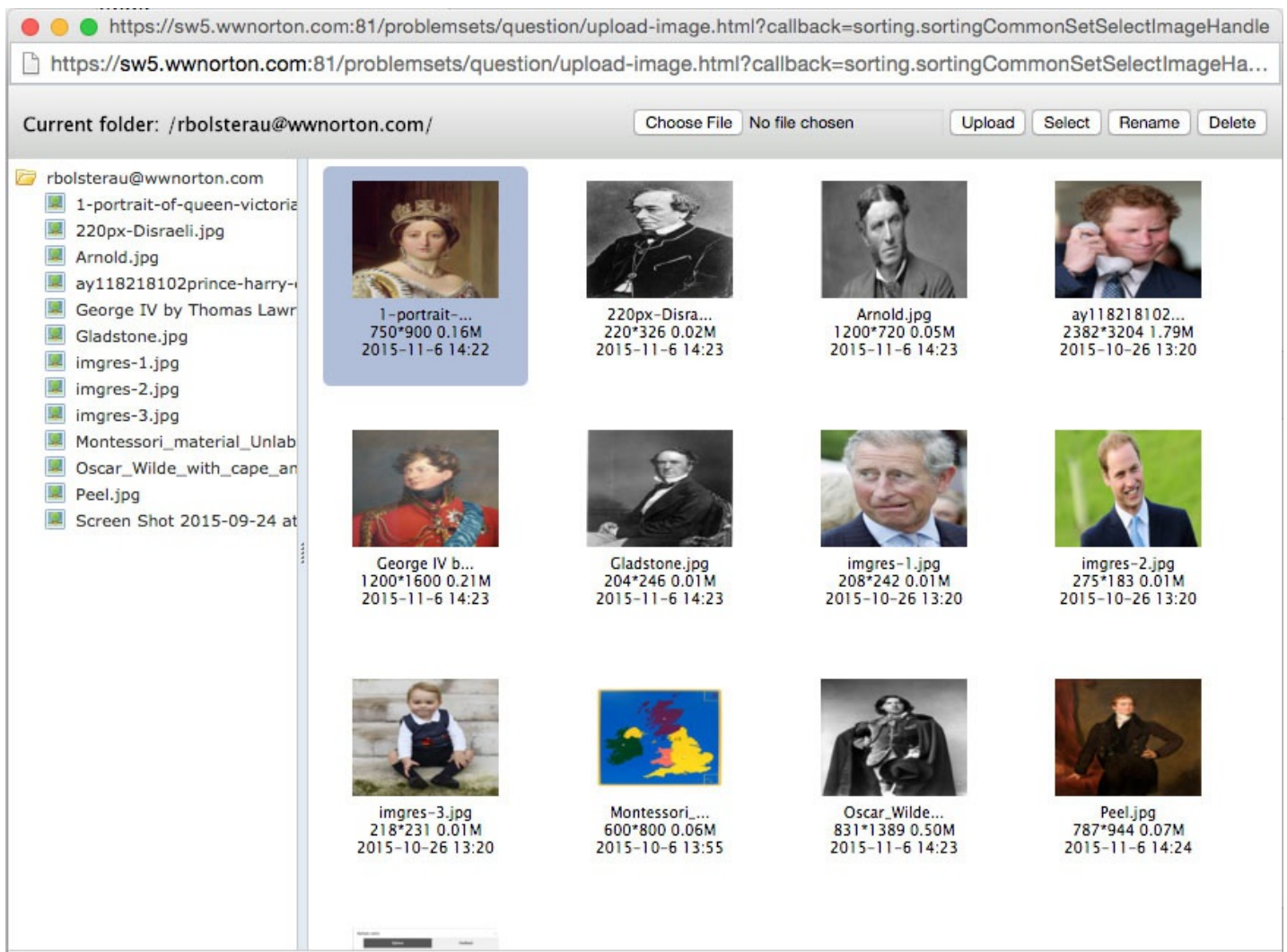
Cancel

☒ Scramble answer choices

- a. Type your category's name into the editable text field at the top of the category bucket. The text field has the words "Add Category Label" in it. Category names are limited to 23 characters.
 - b. There is no limit to the number of categories you can add; however, check with your editor for best practices.
 - c. Delete categories by moving your cursor over the right-hand corner of the category, where an X will appear. Click on the X to delete the category.
3. Add the image items you want students to categorize.
- a. Under the items section, click on the + button.

The screenshot shows a software interface with three tabs: 'Sorting', 'Question/Answer', and 'Feedback'. The 'Feedback' tab is active. Below the tabs, there are two main sections: 'Items' and 'Categories'. The 'Items' section contains a large grey box with a '+' button. A red arrow points to this button with the text 'Click here to add image items'. The 'Categories' section contains a large grey box with a '+' button and three smaller boxes labeled 'Literary figures', 'Monarchs', and 'Prime Ministers'. At the bottom of the interface, there are 'Save' and 'Cancel' buttons, and a checkbox for 'Scramble answer choices' which is checked.

- i. The + button will open up the Image Upload Window, pictured below, which allows you to access all of the images uploaded to the image folder associated with your account:



ii. Upload your image, or choose from among the images in your folder.

- Upload your image by clicking on the “Choose File” button at the top of the window. Once you select the image from your computer, click on the “Upload” button in the top right corner to upload it to your SW5 folder.
- Select a previously uploaded image from your folder by clicking on the appropriate thumbnail.
- You can rename or delete images that are uploaded to your folder using the “Rename” and “Delete” buttons at the top right corner of the window.
- You can only access images that are uploaded to the folder associated with your account. **You cannot access images that are uploaded by another user.**

iii. Double click on the image you would like to use. Once you double click on the image, your image will be successfully uploaded as an item in the Sorting Module Editor. Successfully uploaded items will appear next to the button with the +.

- b. Add a caption to your items so students can readily identify the image. Captions are limited to 15 characters.

The screenshot displays the 'Sorting' tab of the Sorting Module Editor. At the top, there are three tabs: 'Sorting', 'Question/Answer', and 'Feedback'. Below the tabs, there is a search bar labeled 'Items'. The main area is divided into two sections: 'Items' and 'Categories'. The 'Items' section contains a grid of images. The first image is a placeholder with a '+' sign. The second image is a portrait of a man, and the third is a portrait of Queen Victoria. Below the Victoria image is a text box labeled 'Add Caption' with a red arrow pointing to it and the text 'Editable text field'. To the right of the images, there is a red text box that says 'Successfully uploaded items appear here'. The 'Categories' section contains a grid of three columns: 'Literary figures', 'Monarchs', and 'Prime Ministers'. Each column has a dashed box for adding items. At the bottom, there are 'Save' and 'Cancel' buttons, and a checkbox labeled 'Scramble answer choices' which is checked.

- c. To delete an item, move your cursor over it so that an X appears in the upper-right-hand corner. Click on the X to delete the item.
- d. There is no limit to the number of items you may add; however, check with your editor for best practices. If you add more than five images, an arrow will appear that will allow you to scroll through your successfully uploaded items.


Sorting

Question/Answer


Feedback

Items


+




Peel




Wilde



Gladstone



Disraeli



Arnold

Categories

+

Literary figures

Monarchs

Prime Ministers

Save

Cancel

☒ Scramble answer choices


Click here to scroll through your successfully uploaded items


4. If desired, you can edit the labels students see for Items and Categories. In this example, we will edit the labels so that they read “People” (for items), and “Occupations” for categories.
5. Determine if you want the system to randomize the items students see, so that the items appear in a different order every time a student opens up the question. To randomize items, check “Scramble answer choices” in the bottom right hand corner of the module editor.


Sorting
Question/Answer
Feedback


People
Editable text field


+


Peel


Wilde


Gladstone


Disraeli


Arnold

Occupations
Editable text field

+

Literary Figures

Monarchs

Prime Ministers

Save Cancel
☒ Scramble answer choices

Defining the Answer

When you have finished creating all the categories and items, you can build the correct answer in the Question/Answer tab. Do this by dragging each item into its correct category.

Sorting

Question/Answer

Feedback

People

+

Wilde

Gladstone

Disraeli

Arnold

Victoria

Items grey out once they are used in a category

Occupations

+

Literary Figures

Wilde

Monarchs

Victoria

Prime Ministers

Peel

▼

Arrows will appear for categories with multiple images

Save

Cancel

☒ Scramble answer choices

Things to keep in mind when setting the correct answer:

1. As items are placed into categories, they will be greyed out. This ultimately means that a user can only use an item once per category.
2. For categories that have a large number of text items, or multiple image items, arrows will appear in the category bucket, which will allow you to scroll through the items you placed in the category.
3. To remove an item from a category, scroll over the item and click on the X that appears in the upper right hand corner of the item.
4. You cannot drag items between categories. To remove an item from a category in the event of a mistake, click the X on the item in the category so that it returns to the item list; from there, drag the item into the appropriate category.
5. You do not have to sort all of the items you uploaded into categories (this means some of your items can be distractors). However, check with your editor for best practices.

6. Once the Answer tab is set, you can then successfully save the module. Saving the module will close the editor.

Creating Feedback

Smartwork5 determines whether a student's answer is correct or not by recognizing the pattern you specify in the Answer tab. If a student matches the pattern in the Answer tab, the system recognizes the answer as correct. If the student fails to match that pattern, the system recognizes the answer as incorrect.

The Feedback section allows you to write Feedback that the student sees when she triggers these correct and incorrect patterns.

Each Feedback tab contains a text editor, which allows you to add text and other multimedia to the feedback.

Important Note: Copying and pasting text from a Word Document into Smartwork5 could insert formatting that will corrupt the module. Please enter the text directly into the Text Editor, or copy and paste from a plain text document.

The screenshot displays the Smartwork5 editor interface. At the top, there are three tabs: 'Sorting', 'Question/Answer' (which is the active tab), and 'Feedback'. Below the 'Question/Answer' tab, there is a sidebar on the left with three buttons: 'Correct', 'Default', and a '+' button. The main area of the editor is a large text editor with a rich text toolbar at the top. The toolbar includes icons for text formatting (bold, italic, underline, strikethrough, subscript, superscript, font color, background color), alignment (left, center, right, justified), and other features like bullet points, numbered lists, and links. The text editor itself is currently empty. At the bottom of the editor, there are 'Save' and 'Cancel' buttons on the left, and a checkbox labeled 'Scramble answer choices' on the right, which is currently checked.

The Media Palette allows you to insert multimedia into the Feedback tab.



From left to right, the Media Palette allows you to do the following:

- Insert static chemical equations
- Insert static symbolic (math) equations
- Insert algorithmic variables
- Insert image files
- Insert music files
- Insert video files
- Insert hyperlinks
- Remove the hyperlinks

The Text Formatting Palette allows you to format the text in answers, as well as add special characters.



From left to right, the Text Formatting Palette allows you to do the following:

- Bold text
- Italicize text
- Underline text
- Insert subscripts
- Insert superscripts
- Insert math formulas *This button is being phased out. To insert math formulas, please use the
- Insert special characters
- Remove any formatting applied to the text

Furthermore, the Feedback Formatting Palette allows you to do the following:



- Insert tables
- Insert line breaks

- Edit text in full screen mode

Correct and Default Feedback

The Feedback tab will initially have a tab for **Correct feedback**, which a student sees whenever she matches the pattern in the Answer tab. It will also have a tab for **Default feedback**, which a student will see whenever she creates an unspecific pattern that does not correspond to what is in the Answer tab. Default feedback will trap for all incorrect answers unless otherwise specified in a Specific Feedback tab, which will be discussed in the next sections.

To set Correct feedback, do the following:

1. Type up what you want the student to see when she places all the items into their proper categories. Add any multimedia you see fit using the palettes in the text editor.

The screenshot shows the 'Question Editor' interface with three tabs: 'Sorting', 'Question/Answer', and 'Feedback'. The 'Feedback' tab is active. On the left, there is a sidebar with 'Correct', 'Default', and a '+' icon. The main area is a text editor with a toolbar containing icons for undo, redo, bold, italic, underline, strikethrough, subscript, superscript, font color, background color, link, unlink, list, and table. The text in the editor reads: 'Correct! Historians will be the first to note that the Victorians loved putting everything into neat little categories. It is great that you can put them into categories as well!'. At the bottom, there are 'Save' and 'Cancel' buttons, and a checkbox labeled 'Scramble answer choices' which is checked.

2. Save the question.
3. Go to preview mode in the Question Editor. Check that the feedback is working correctly by recreating the correct answer in the preview window.

You should see the feedback that you wrote in the Correct Feedback tab:

The screenshot shows a quiz interface with a feedback modal open. The modal has a title bar with an information icon and the word "Feedback", and a close button (X). Below the title bar, there are two tabs: "1st attempt" and "Correct". The "Correct" tab is active, showing a green checkmark icon and the text "Correct". The feedback text reads: "Correct! Historians will be the first to note that the Victorians loved putting everything into neat little categories. It is great that you can put them into categories as well!". The background of the quiz is dimmed. It shows a "People" section with four portraits and a "Occupations" section with three categories: "Literary Figures" (containing a portrait of Arnold), "Monarchs" (containing a portrait of Victoria), and "Prime Ministers" (containing a portrait of Gladstone). At the bottom right, there is a "QUESTION COMPLETED" message with a green checkmark icon.

To set Default feedback, do the following:

1. Type up what you want the student to see when she places the items into the incorrect categories.

Sorting










Question/Answer

Feedback

Correct

Default

+

H₂O √5       **B** *I* U \times_2 \times^e f_x Ω I_x   

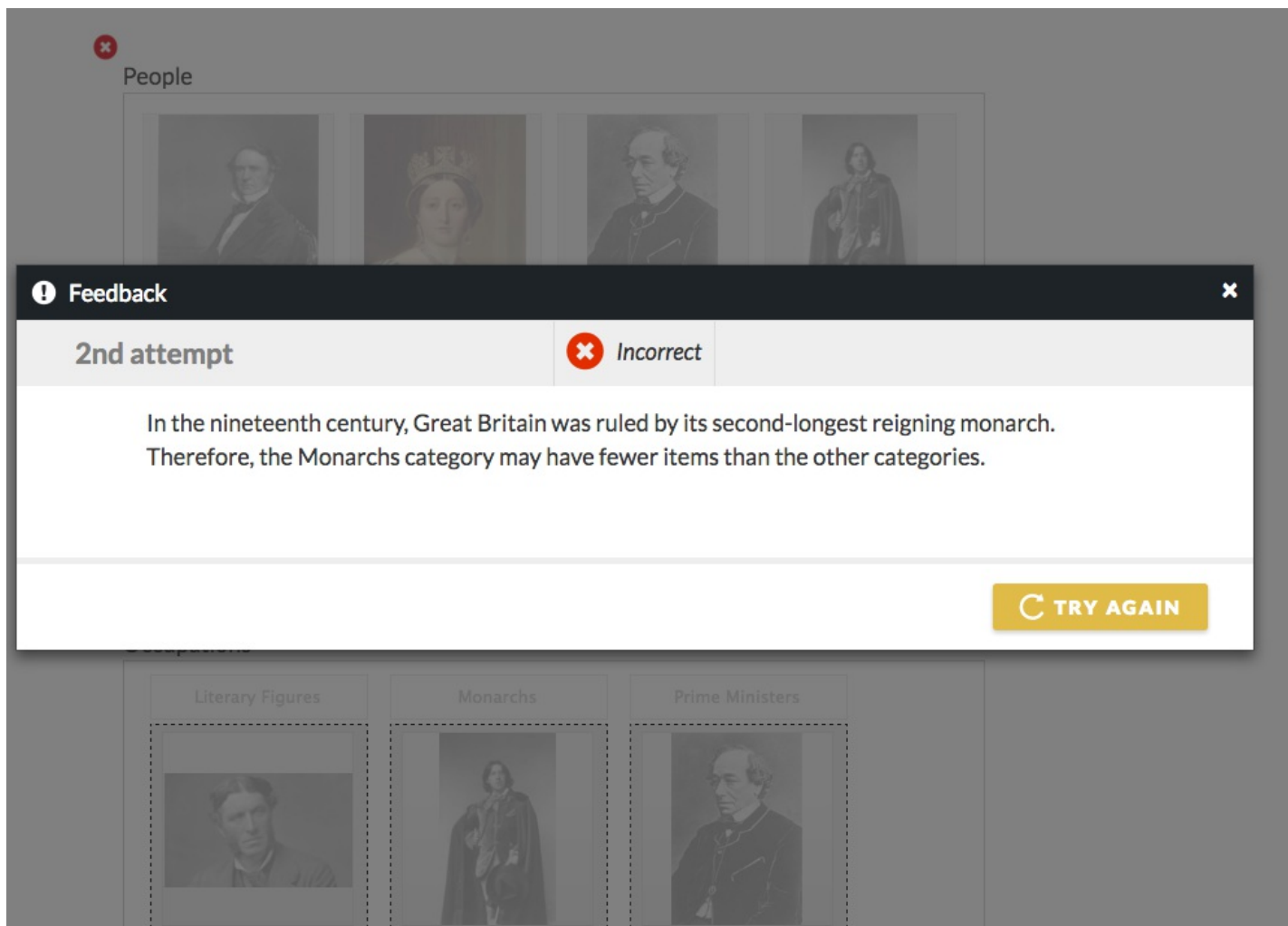
In the nineteenth century, Great Britain was ruled by its second-longest reigning monarch. Therefore, the Monarchs category may have fewer items than the other categories.

Save Cancel

☒ Scramble answer choices

2. Save the question.
3. Go to preview mode in the Question Editor. Check that the feedback is working correctly by recreating a pattern that is NOT correct in the preview window.

You should see the feedback you created in the Default Feedback tab:



Creating Specific Incorrect Feedback

You can create feedback for specific incorrect answers by using the Specific Incorrect Feedback tabs.

When creating specific incorrect patterns, you can either use all of the categories and items or only use some of the categories and items. Feedback that only uses some of the categories and items can trigger **Cascading Feedback**, which will be discussed in the next section.

To set specific incorrect feedback using all of categories and items, do the following:

1. Click on the tab with the plus sign to add a Specific Incorrect Feedback tab.
2. In the tab's Categories section, set the incorrect answer you want to trap for.
3. Type up what you want the student to see when she sorts the items this way.

Sorting

Correct

Default

Specific 1

Specific 2


Specific 3

+


Question/Answer

Feedback


People




Peel




Wilde



Gladstone




Disraeli



Arnold


Occupations

Literary Figures




Disraeli

Monarchs



Arnold

Prime Ministers



Gladstone

H₂O

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x²

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☰

🔄

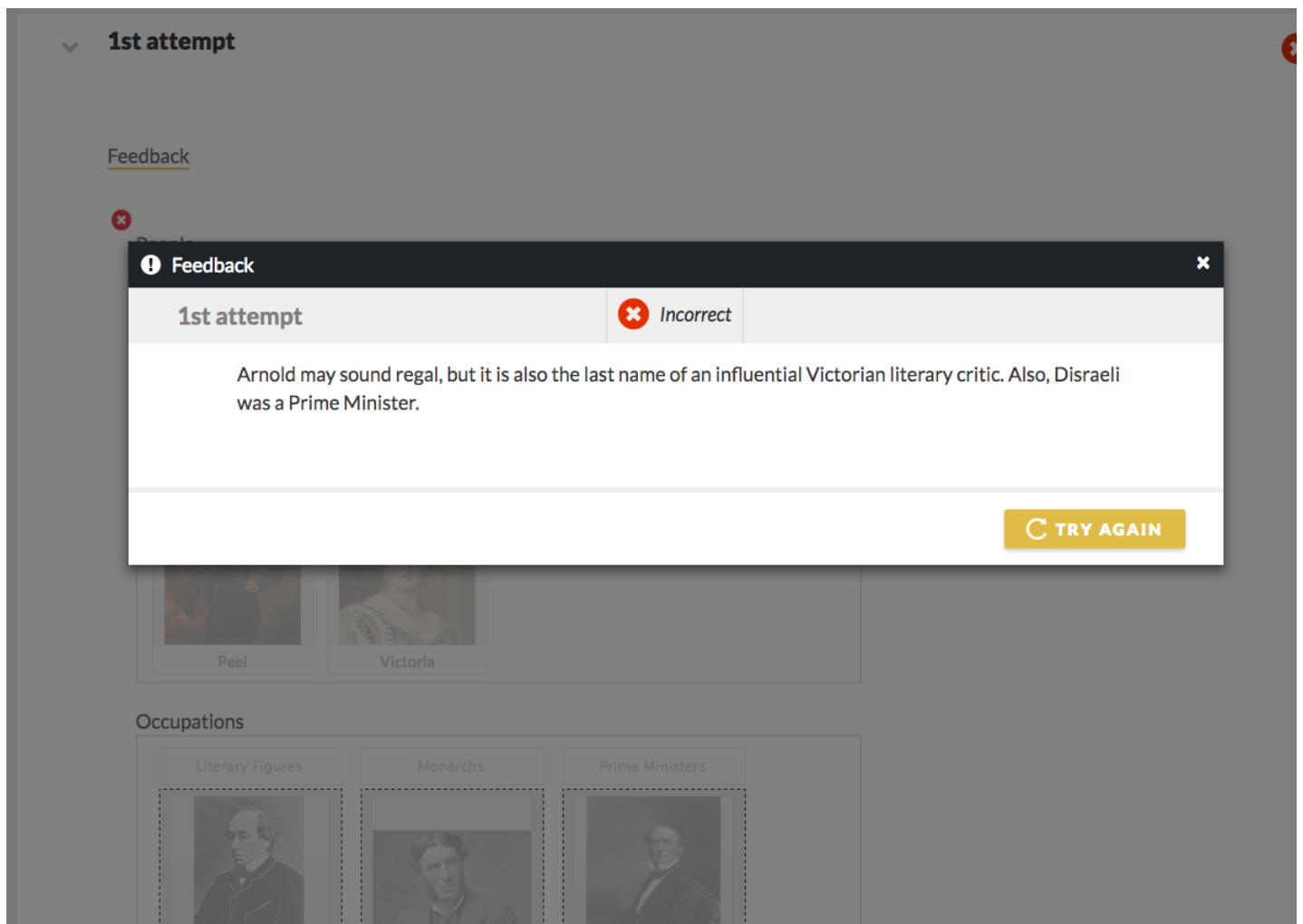
Arnold may sound regal, but it is also the last name of an influential Victorian literary critic. Also, Disraeli was a Prime Minister.

Save

Cancel

☒ Scramble answer choices

- Save the question.
- Go to preview mode in the Question Editor. Check that the feedback is working correctly by sorting the items as you did in the Incorrect Feedback tab. You should see the Feedback you created in the Specific Incorrect Feedback tab:



Cascading Incorrect Feedback

Winking (Feedback that Uses Fewer than All the Categories)

In addition to creating incorrect feedback for patterns that use all of the categories and items, users can create incorrect feedback for patterns that only use some of the categories and items.

Unlike the Answer tab, each category in the Specific Feedback tab has little eyes. These indicate whether or not the system should ignore what a student places in the category. This is called **Winking**.

To tell the system to ignore what a student places in a category, authors should click on the eye so that a slash goes through the eye icon. This tells the system to focus entirely on what students place in the categories that are not winked.

The screenshot shows the 'Question/Answer' tab in the Winking interface. On the left, there's a 'Sorting' sidebar with options: 'Correct', 'Default', 'Specific 1', 'Specific 2' (with a trash icon), and 'Specific 3' (with a plus icon). The main area is divided into 'People' and 'Occupations' sections. The 'People' section shows five portraits with names: Peel, Wilde, Gladstone, Disraeli, and Arnold. The 'Occupations' section has three columns: 'Literary Figures' (winked out), 'Monarchs' (winked out), and 'Prime Ministers' (not winked out). Red arrows point to the 'Monarchs' and 'Prime Ministers' categories with text explaining the system's recognition of items placed in these categories. At the bottom, there's a 'Save' button, a 'Cancel' button, and a checkbox for 'Scramble answer choices' which is checked.

A few things to keep in mind about Winking:

1. If an author fails to wink out a category and leaves it blank in the incorrect answer tab, the system will assume that category was intentionally left blank. This means that in order to trigger that set of specific feedback, a student will have to leave that category blank.
2. When creating specific incorrect feedback, items cannot be placed into categories that have been winked out.

Feedback that Uses One or Two Items

In addition to Winking out categories, authors can create feedback using fewer than all the items.

When creating feedback for only one or two items, it will not matter what additional items a student also places in the category. As long as the student places that specific item into the incorrect category, as defined in the incorrect feedback tab, she will trigger the specific incorrect feedback.






To create feedback using only one or two items, do the following:

1. In the specific incorrect feedback tab, drag your items into an incorrect category. In this example, we will only use one item.
2. Wink out the other categories you are not using.
3. Write the text you want the student to see when she sorts this one item into that incorrect category.

Sorting
Question/Answer
Feedback

Correct
Default
Specific 1
Specific 2
Specific 3
+


People






Peel

Wilde

Gladstone

Disraeli

Arnold

Occupations

Literary Figures

Monarchs

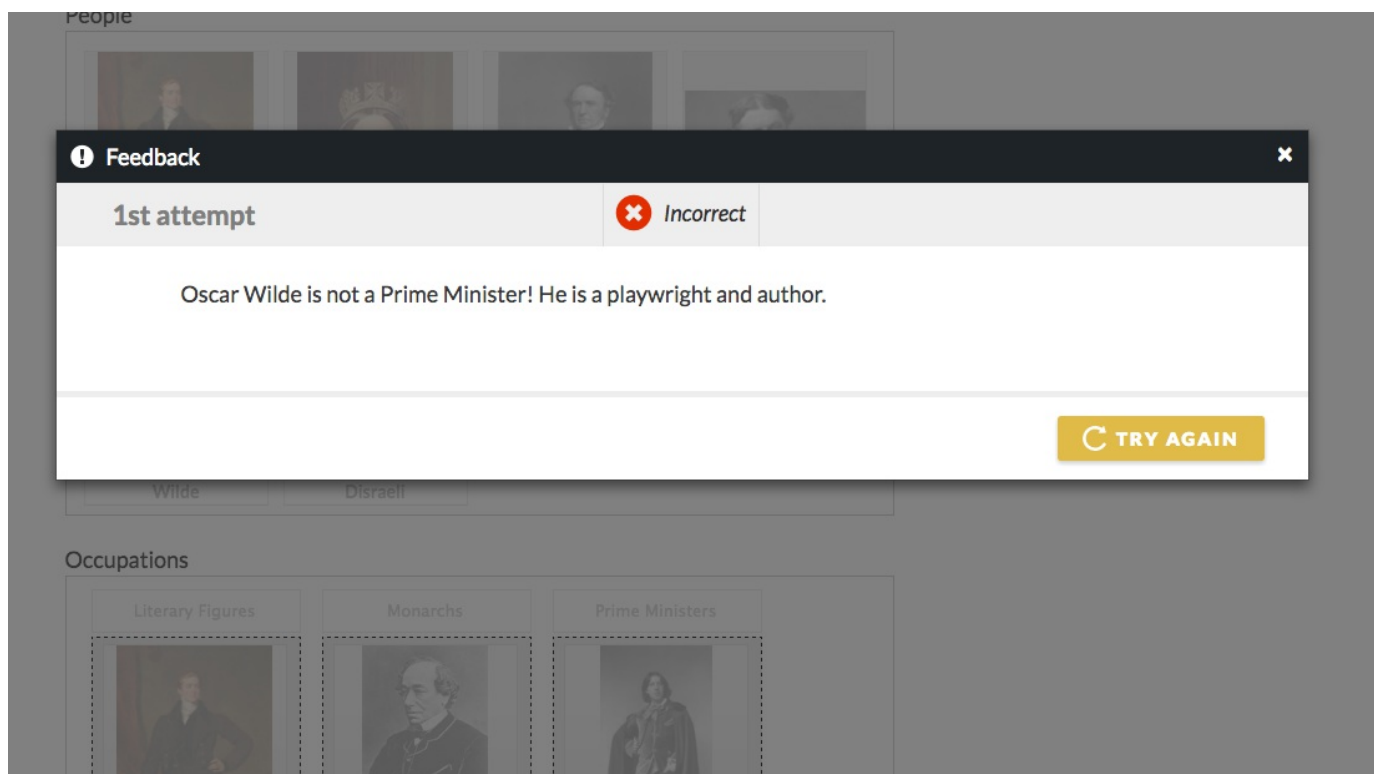
Prime Ministers

Wilde

H_2O $\sqrt{5}$ $\frac{1}{2}$    
B *I* U \times_2 \times^2 f_x Ω I_x

Oscar Wilde is not a Prime Minister! He is a playwright and author.

Save
Cancel
☒ Scramble answer choices

4. After saving the module, go to preview in the Question Editor. Make sure that the feedback is working correctly by sorting that particular item into the designated incorrect category.



Cascading Feedback

Because it is possible to create feedback for only some of the categories and items, the system will layer feedback if the student triggers multiple incorrect patterns. This is called **Cascading Feedback**.

The goal of Cascading Feedback is to minimize the number of attempts a student must make in order to arrive at the correct answer.

Cascading Feedback cannot be turned off.

Important Note: Cascading Feedback will NOT trigger if a specific feedback tab has tiles in only one category, and another specific feedback tab only has tiles in a different category. In order for Cascading Feedback to work, one of your Specific Feedback tabs must have tiles in more than one category. For example, Specific Feedback Tab 1 has tiles in Monarch category and only the Monarch category. Specific Feedback Tab 2 only has tiles in the Prime Minister category. If you try to trigger Cascading Feedback by fulfilling Specific Feedback 1 and Specific Feedback 2, it will not work. However, if Specific Feedback Tab 1 also has a tile in the Prime Minister category, Cascading Feedback will trigger. **If you have questions about this, please contact your editor.**

To create Cascading Feedback, do the following:

1. On a Specific Feedback tab, create a pattern using one or more items and categories. For simplicity's sake, this first example will only use one item and one category. Be sure to wink out the categories that are not being used in this pattern.

Sorting

Correct

Default

Specific 1

Specific 2


Specific 3

+


Question/Answer

Feedback


People




Peel




Wilde



Gladstone



Disraeli




Arnold

Occupations

Literary Figures

Monarchs

Prime Ministers



Wilde

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Oscar Wilde is not a Prime Minister! He is a playwright and author.

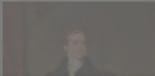
Save

Cancel


☒ Scramble answer choices

- After saving the module, go to preview mode in the Question Editor. Make sure that your feedback is working correctly by recreating the incorrect pattern in the preview window.


People




Peel



Wilde



Gladstone



Disraeli

Feedback

1st attempt

✖ Incorrect

Oscar Wilde is not a Prime Minister! He is a playwright and author.


🔄 TRY AGAIN

Occupations

Literary Figures

Monarchs

Prime Ministers



Wilde

- Go back to the Module Editor and create another incorrect pattern with feedback. Be

sure to wink out all of the categories you are not using.

Sorting

Correct

Default

Specific 1

Specific 2


Specific 3

+


Question/Answer

Feedback


People




Peel




Wilde



Gladstone



Disraeli




Arnold

Occupations


Literary Figures

Monarchs



Disraeli


Prime Ministers





Victoria


H_2O

$\sqrt{5}$









B

I

U


x_y


x^y


f_x

Ω

I_x







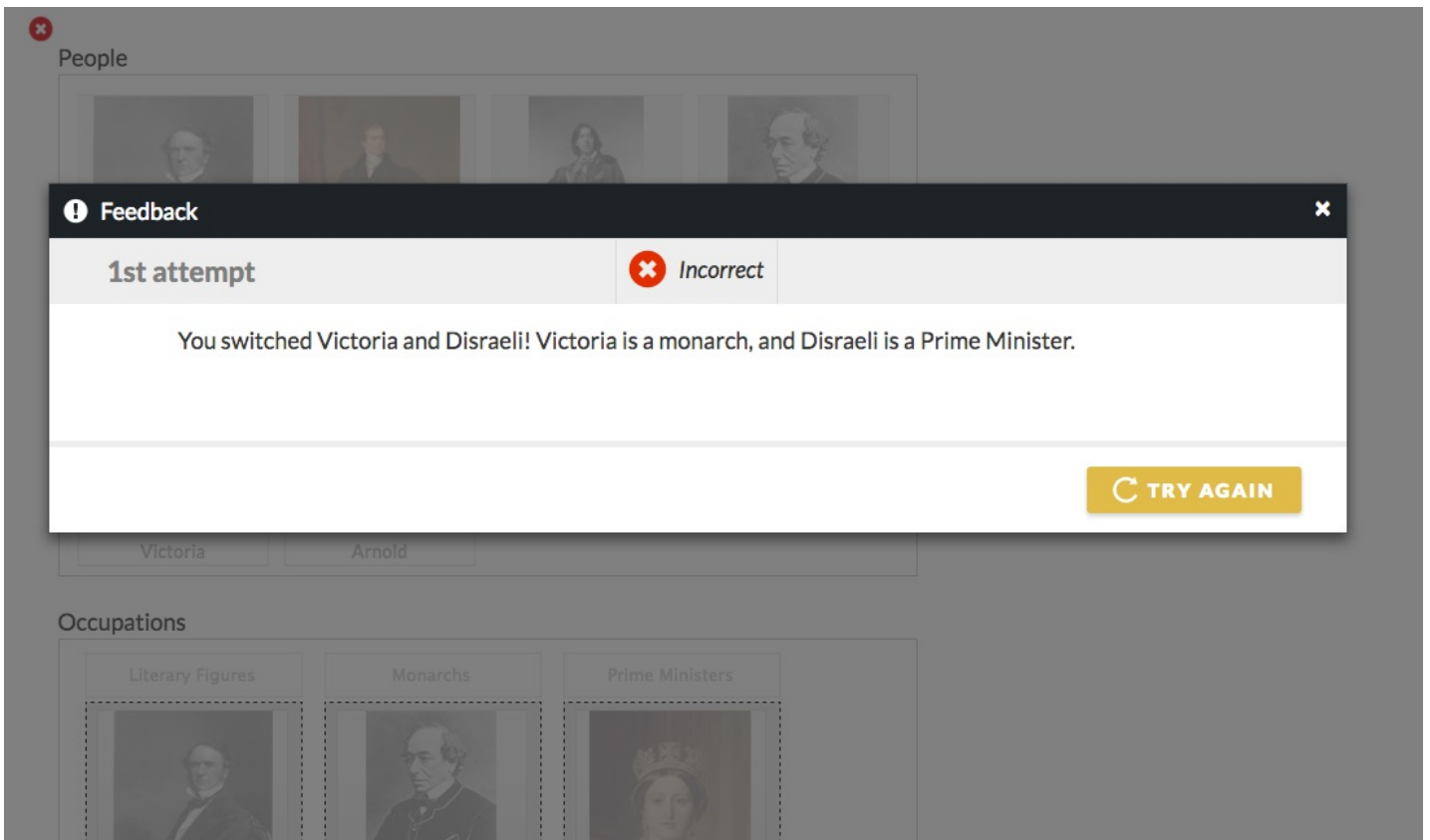
You switched Victoria and Disraeli! Victoria is a monarch, and Disraeli is a Prime Minister.

Save

Cancel

☒ Scramble answer choices

- After saving the module, preview the question and make sure this new set of incorrect feedback is working correctly.



5. When you confirmed that both sets of feedback are working correctly, refresh the preview, and recreate both incorrect patterns at the same time. The system will display both sets of feedback at once.

