

## New features in Problem-Attic – Sept. 2013

This document explains some recent changes to Problem-Attic. Here is quick overview:

- The original CCSS math questions and free-response supplement are merged into a single database.
- Common Core standards are abbreviated for easier selection.
- New Filter button. On the Select screen, you can filter out multiple-choice or free-response, odds or evens, or questions that were already used.
- New Add button. When viewing a topic, objective or state test, you can add all problems at once or a certain number at random—a great time-saver!
- New Format option: hide answer choices. Now you can turn most multiple-choice questions into free-response automatically.
- Set problem properties such as objective and workspace, force a problem to be “fullwidth”, insert a page break, and more.

**Important:** The new options are for individual and school subscribers only. For other registered users of Problem-Attic, the options are available for trial in the Play Area.

Below you will find details about each new option and plenty of screenshots that relate the information to the website.

The screenshot shows the 'Documents' page in Problem-Attic. At the top, there are buttons for 'Delete', 'Rename', 'Preview', 'Score', 'Export', 'Browse', and 'New'. Below these is a table with columns for 'Title', 'Problems', and 'Last Saved'. To the right of the table is a yellow 'What's New' sidebar with an orange arrow pointing left.

Title	Problems	Last Saved
<input type="checkbox"/> <a href="#">Practice for AP 4th week</a>	46	Sep 21
<input type="checkbox"/> <a href="#">Review for test #2</a>	16	Sep 20
<input type="checkbox"/> <a href="#">Challenger sheet</a>	32	Sep 18
<input type="checkbox"/> <a href="#">quiz period 3</a>	16	Sep 18
<input type="checkbox"/> <a href="#">textbook 1-4 suppl</a>	27	Sep 10
<input type="checkbox"/> <a href="#">warmup period 3</a>	3	Sep 6
<input type="checkbox"/> <a href="#">Pop quiz 4th period</a>	5	Sep 4
<input type="checkbox"/> <a href="#">Ideas for test questions</a>	4	Sep 4
<input type="checkbox"/> <a href="#">warmup period 2</a>	5	Aug 30
<input type="checkbox"/> <a href="#">pre-test for chapter 1</a>	16	Aug 30
<input type="checkbox"/> <a href="#">review material (summer break)</a>	6	Aug 28
<input type="checkbox"/> <a href="#">review (spring 2013)</a>	12	Aug 27

**What's New** ←

**Sept 23 –**  
Released tests from 5 more states. A big welcome to DE, MS, SC, WI and WV! [\(details >\)](#)

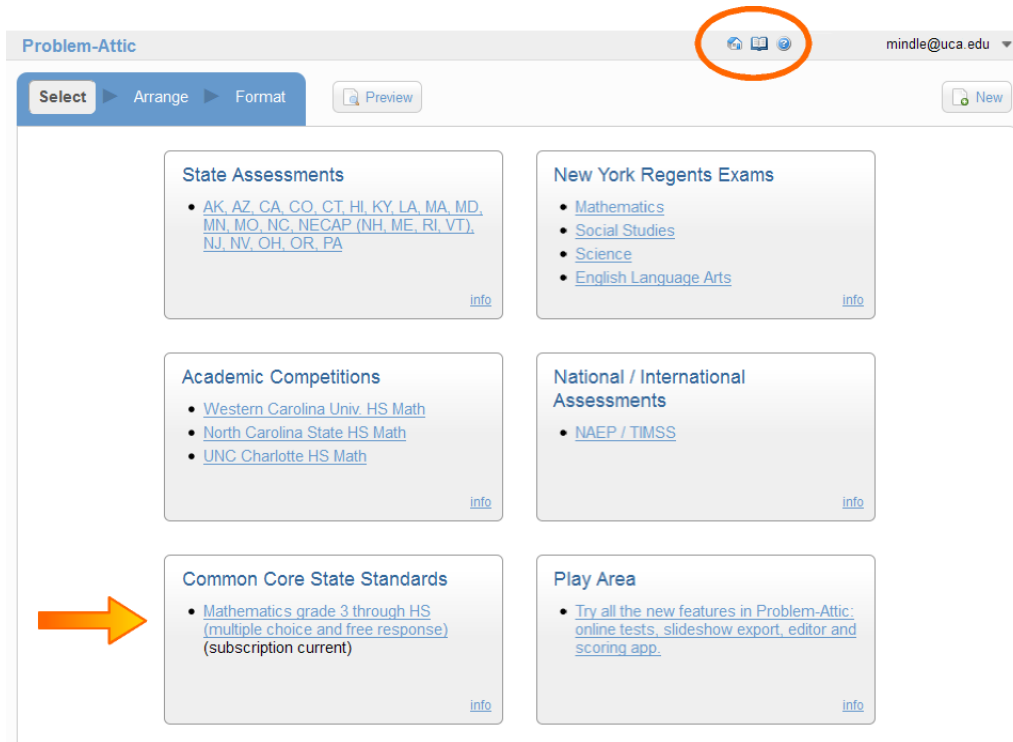
**Sept 16 –**  
Filter and select options (for subscribers). Turn multiple-choice into free-response. [\(details >\)](#)

**Coming Soon**  
Document folders, design your own question bank [\(read more >\)](#)

[Try Export in the Play Area](#)  
[Subscription Options](#)

## 1 CCSS Math Merged

Previously, Common Core Math questions were separated into two groups: a multiple-choice bank and free-response supplement. Now they are merged into a single bank.



The merge was made possible because of two new features in Problem-Attic, both of which are described in this document: (1) a filter that lets you separate questions by type; and (2) a format option that lets you turn multiple-choice questions into free-response.

At present, for each Common Core standard, the free-response questions start *after* the multiple-choice questions. Over the next few months, they will be re-ordered from least to most difficult with less of a distinction between question type.

Note:

- When we use the term “free-response” in this document, we mean any question type that is *not* multiple-choice. This includes short answer, multi-step and open-ended questions, as well as tasks.
- In case you didn’t know, two small icons were added to Problem-Attic during the summer. They are circled in the figure above. The **home** icon takes you to your list of documents. The **book** icon takes you from anywhere in the program to the main six selection panels. (It behaves a little like the Browse button.) The third icon, which is a **question mark**, has been present since the launch of Problem-Attic; it takes you to online help.

## 2 Standards Abbreviated

Many Common Core standards are quite lengthy. This can make them hard to read in a web browser, where line-wrapping is unpredictable, and it can make searching for a particular standard difficult.

To improve formatting and make selection easier, the standards are now abbreviated in Problem-Attic. You'll see this on all of the Select pages for CCSS Math (except in the Play Area).

The screenshot shows the Problem-Attic interface for Mathematics grade 3 through HS. The navigation bar includes 'Select', 'Arrange', 'Format', 'Preview', and 'New'. The main content area is titled 'Mathematics grade 3 through HS' and has tabs for 'Elementary', 'Middle', and 'High School'. Under 'Elementary', there are sub-tabs for 'Grade 3', 'Grade 4', and 'Grade 5'. The 'Grade 3' tab is active, and the 'Operations and Algebraic Thinking' section is expanded. A large orange bracket on the right side of the list of standards indicates that they are abbreviated. The standards listed are:

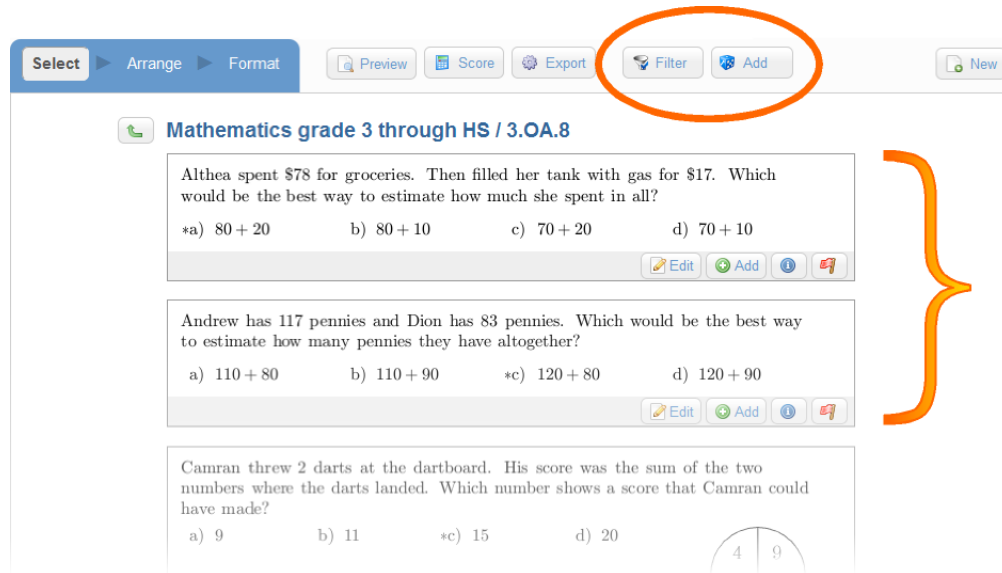
- Multiplication and division.
  - [\[3.OA.1\] Products of whole numbers.](#)
  - [\[3.OA.2\] Quotients of whole numbers.](#)
  - [\[3.OA.3\] Multiply and divide to solve problems.](#)
  - [\[3.OA.4\] Determine unknown number in equation.](#)
- Multiplication and its relationship to division
  - [\[3.OA.5\] Apply properties of operations.](#)
  - [\[3.OA.6\] Understand division as an unknown-factor.](#)
- Multiply and divide within 100.
  - [\[3.OA.7\] Fluently multiply and divide within 100.](#)
- Solve problems involving the four operations.
  - [\[3.OA.8\] Two-step word problems: estimation.](#)
  - [\[3.OA.9\] Arithmetic patterns.](#)

If you wish to view a full written-out standard, point to the shortened version for a second or two. This is sometimes called “hovering”. The full standard will appear, then go away when you click or point somewhere else.

The screenshot shows the Problem-Attic interface for Mathematics grade 3 through HS, similar to the previous one. The 'Operations and Algebraic Thinking' section is expanded. A large orange arrow points to the standard [\[3.OA.3\] Multiply and divide to solve problems.](#). A tooltip box has appeared over this standard, displaying the full text: 'Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number.' The rest of the standards list is visible but partially obscured by the tooltip.

### 3 New Select Buttons

There are two new buttons on the Select page: Filter and Add. These show up at the lowest-level only, when you are looking at problem thumbnails.



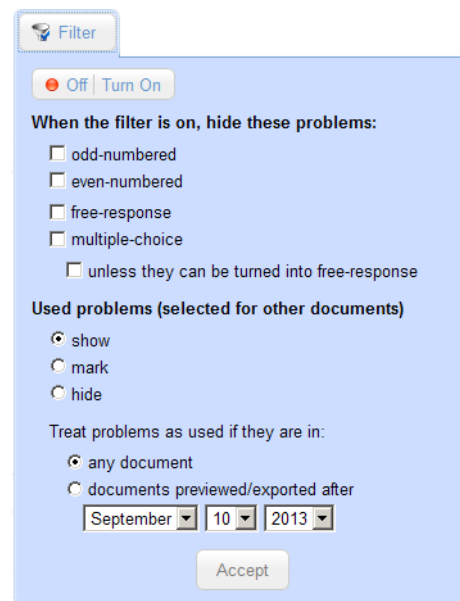
The Filter and Add buttons are useful throughout Problem-Attic. *They work with ALL questions and subjects.* However, they are especially useful for Common Core Math, because of its design, namely the odd/even pairing of questions and a general progression from easiest to most difficult. (You can see an example of odd/even pairing in the figure above.)

#### 3.1 Filter

Click the Filter button to view/set the options. To make the options go away without making any changes, click the Filter button a second time.

The filter is off by default. The options will not get applied until you turn the filter on.

**Important:** The filter stays on until you turn it off, or until you log out of Problem-Attic. This is true even if you move between selection screens or go to a different bank of questions.



Here is a brief description of the filter options.

### **Odd/Even**

In Problem-Attic, all questions are odd or even based on their positional value in the database, not where they end up in your document. For the vast majority of questions, odd/even is an arbitrary distinction and the filter option is not very useful.

For Common Core math, however, the option can help with review, make-up tests, pre- and post-tests, etc. Because questions are paired (two in a row are similar), you may like to hide the odds or the evens. Then you can browse half as many questions and still get a good idea of what's available. Moreover, by doing this, you'll keep the matching questions in reserve for use later.

### **Free-response/Multiple-choice**

Most categories in Problem-Attic include a mix of question types. This option lets you filter out those which are either free-response or multiple-choice. Doing so may help you locate the types of questions you want.

Notice there is a sub-option for multiple-choice. Since Problem-Attic can convert most—but not all—multiple-choice questions into free-response, you may want to keep the “convertible” questions visible. If so, choose the sub-option.

### **Used Problems**

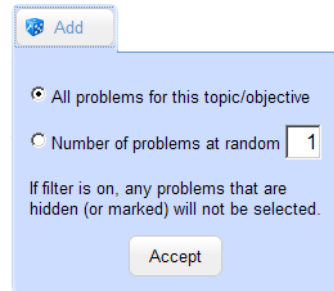
The problems you've selected for other documents can be hidden or marked. Basically, the marking of problems is just a way for you to avoid re-selecting them. But you can do so if you wish; Problem-Attic will not stop you. If problems are hidden, then there's no way to re-select them.

If you like, you can hide or mark problems based on when they were last used. For this option, the relevant date is when documents were previewed or exported, not when they were created. You can set the date to coincide with a new grading period or school year, or perhaps the beginning of a teaching unit.

### 3.2 Add

The new Add panel lets you select all problems in a category at once, or select a certain number at random. To view the panel, click the Add button. To dismiss it without actually selecting any problems, click the Add button a second time.

Please note that the Add options work across all pages for the current category only. Generally 20 thumbnails are shown per page. Depending on the total number of problems in a category, you could get considerably more than 20 if you choose “All”.



Note:

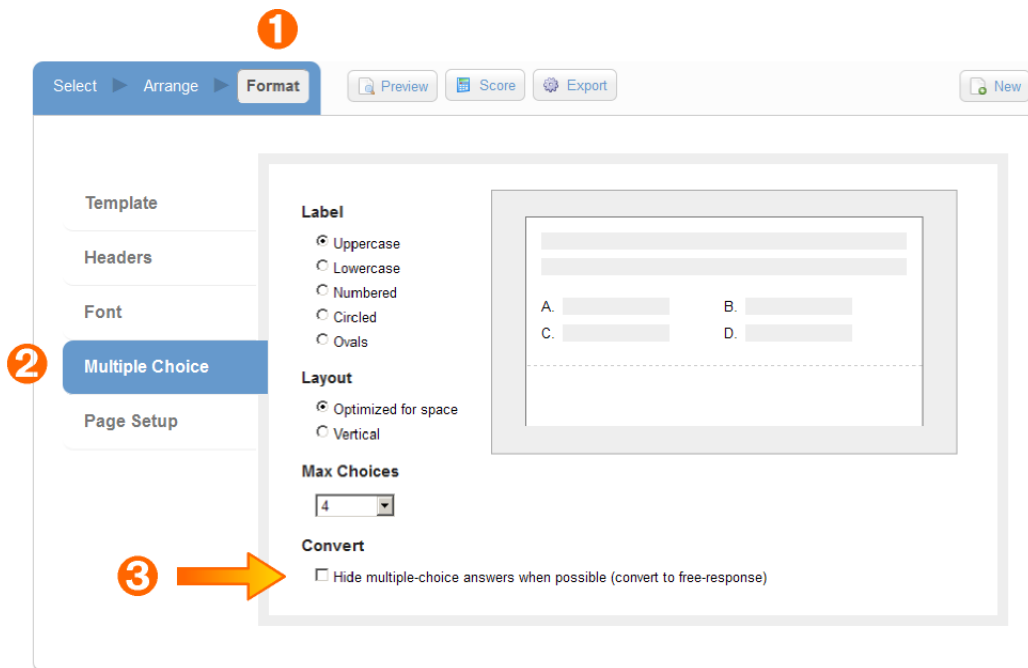
- Problem-Attic sets a limit of 200 problems per document. The Add feature will safely work within this limit, stopping when it gets to the maximum. Similarly, if you choose a random number of problems, Problem-Attic will not let it exceed the number of problems that are actually in a category.
- There is currently no undo feature for adding all problems or a certain number at random. If you add too many, you can go to the Arrange page and delete them one-at-a-time or all at once with the button “Remove All Problems”.
- The Add options ignore problems that are hidden or marked. If you want to make sure that you’re getting all problems, you should turn off the filter before pressing the Add button.

### 4 Format > Multiple Choice > Convert

Problem-Attic now has an option to convert multiple-choice into free-response. It does this by hiding the choices. The option can be applied to an entire document or individual problems.

To apply the option to an entire document:

1. Go to the Format page.
2. Click the Multiple-Choice tab.
3. Check the box that says “Hide multiple choice answers...”



The next section tells how to apply the option to individual problems.

**Important:** Not all problems can be converted to free-response. That's why, on the Format page, the option says "when possible." Please see the section below for more details about hiding choices.

## 5 Problem Overrides

In Problem-Attic, the Format page is where you set *document-wide* options, such as template. Now you can override some of those options and set properties for individual problems.

Overrides are done on the Arrange page. The steps are shown below for the two views, List and Grid.

## 5.1 List view

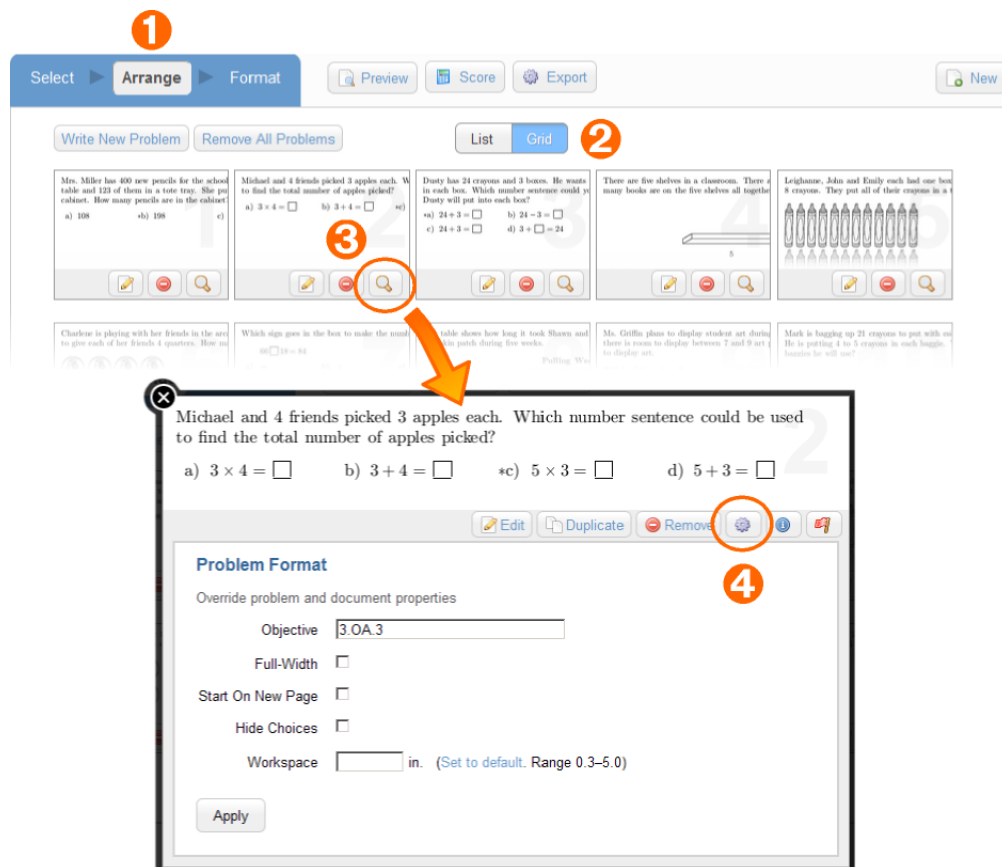
1. Go to the Arrange page.
2. Click List view if it's not already selected.
3. Click the gear icon for a particular problem. A panel will drop down. The details for this panel are given below. When you are finished making changes, click the Apply button.

The screenshot shows the software interface in the 'Arrange' view. At the top, there are tabs for 'Select', 'Arrange', and 'Format'. Below these are buttons for 'Preview', 'Score', and 'Export'. A secondary row of buttons includes 'Write New Problem', 'Remove All Problems', 'List', and 'Grid'. The 'List' button is highlighted with a red circle and the number '2'. Below this, a problem is displayed: 'Mrs. Miller has 400 new pencils for the school year. She has 79 of them on her table and 123 of them in a tote tray. She put the rest of the pencils in her cabinet. How many pencils are in the cabinet?' with multiple choice options: a) 108, \*b) 198, c) 202, and d) 602. A red circle with the number '3' is around the gear icon in the problem's toolbar. An orange arrow points from this gear icon to a 'Problem Format' panel that has opened. The panel contains the following fields and options: 'Objective' with a text input containing '3.OA.8', 'Full-Width' with an unchecked checkbox, 'Start On New Page' with an unchecked checkbox, 'Hide Choices' with an unchecked checkbox, and 'Workspace' with a text input and the text 'in. (Set to default. Range 0.3-5.0)'. An 'Apply' button is at the bottom of the panel. A red circle with the number '1' is also visible in the top right corner of the problem area.

## 5.2 Grid view

1. Go to the Arrange page.
2. Click Grid view if it's not already selected.
3. Click the magnify icon for a particular problem. You'll see a full-size thumbnail.
4. Click the gear icon on the thumbnail. A panel will drop down. The details for this panel are given below. When you are finished making changes, click the Apply button, then click the 'X' in the top-left corner.





## 6 More Details about Problem Overrides

Any changes that you make in List or Grid view affect the current document only. In other words, “overrides” do not affect the original problem or what’s stored in the database. If you want to make a more permanent change (e.g., to an objective), then you need to Edit a problem. Please see the instructions further down.

The following properties and formatting options can be set on the Arrange page, in List or Grid view:

### Objective

Use this field to enter an objective for a problem or change the objective that was previously assigned (e.g., for CCSS Math). The objective will show up on the answer key for the current document. You can use any regular keyboard characters, including spaces. A practical size limit is about 20 characters.

### Full-Width

Use this option to force a problem to be formatted in a single column—i.e., to be as wide as possible. This option is relevant to test and worksheet layouts only; it is ignored on flash cards and overheads.

Problem-Attic can switch between 1 and 2 columns almost anywhere in a document. If you force a problem to be full-width, the previous number of columns will be restored afterward.

If your document includes a vertical line down the middle of the page, a switch between 1 and 2 columns can produce a T- or inverted-T-like layout. On rare occasions you can get both, producing an I-beam-like layout. If you don't want this to happen, you can force a page break, as described below.

### **Start on a new page**

This option forces a page break *before* the current problem. It is relevant to test and worksheet layouts only; it is ignored on flash cards and overheads.

Please note that a page break travels with a problem. (The break is associated with the physical problem, not the number or position in your document.) Generally it's best to arrange problems in the order you want and to see how pages are laid out before forcing any breaks.

### **Hide choices**

This option will convert a multiple-choice problem into free-response, if possible. It works the same as the option for an entire document, but it can be applied problem-by-problem. Please see the section below for more information about hiding choices.

### **Workspace**

With this option you can adjust the amount of space that appears below a problem, so that students have room to show their work. You can specify a value from 0.3 to 5.0 inches. (This will override Problem-Attic's default value of about one-half inch.)

**Important:** The workspace option is relevant only to tests and worksheets and only if you tell Problem-Attic to include workspace on your document. To include workspace, go to the Format page, click Template, then check the box that says, "Include space for students to show their work." *If the document-wide option is not checked, then workspace overrides are ignored.*

Please note that Problem-Attic does various optimizations when constructing pages. For example, if there is extra vertical space on a page, it gets evenly distributed. Also, Problem-Attic does a little stretching and shrinking of workspace (about 25%) for better page breaks. Therefore, if you measure the space on a printed page, it may be slightly different than what you specify.

## 7 Edit > Properties tab

Previously in Problem-Attic, there were three tabs on the Edit page: Stem, Answer and XFigure. Now there is a fourth tab called “Properties”.

Problem properties are saved in the database with the text of a problem. Unlike overrides, the changes you make on the Properties tab affect the current *and* future documents.

To make changes, follow these steps:

1. On the Select or Arrange page, click the Edit button on a problem thumbnail.
2. In the editor, click the Properties tab.
3. Set properties and make any other changes you want to the problem, then press the Save button.

The image shows a sequence of three screenshots illustrating the process of editing a problem's properties. The top screenshot shows a problem list with a problem about crayons and boxes. A red circle with the number '1' highlights the 'Edit' button. The middle screenshot shows the 'Problem Editor' with the 'Properties' tab selected, indicated by a red circle with the number '2'. The bottom screenshot shows the 'Properties' tab with the 'Objective' field set to '3.OA.8', indicated by a red circle with the number '3'. A large orange arrow points from the 'Properties' tab in the middle screenshot to the 'Objective' field in the bottom screenshot.

Here is more information about Problem properties.

### Objective

Use this field to enter an objective for a problem or change the objective that was previously assigned (e.g., for CCSS Math). You can use any regular keyboard characters, including spaces. A practical size limit is about 20 characters.

Note: An objective that is saved with the text of a problem can be overridden on a particular document. See “Problem Overrides” above for more information.

### Full-Width

This option is the same as described above (“Problem Overrides”), except that it’s set on the problem-level. You might want to do this if a problem should always be as wide as possible, no matter what document template is chosen. This may be appropriate if the problem involves measurement and should never be reduced in size, or if a part of the problem would become unreadable if it were scaled to fit.

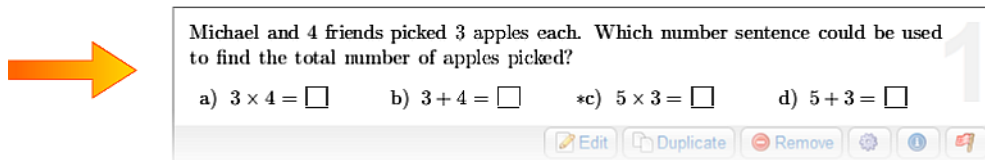
### Language

The language option tags a problem for selection and filtering purposes. It will become more useful in the future when problems are matched up for different languages, such as English and Spanish. *The option does not translate the text of the problem.*

## 8 More Details about Hiding Choices

As mentioned above, multiple-choice questions cannot always be converted into free-response. Conversion is possible only if choices can be hidden and a question still makes sense.

For example, if a question includes the phrase, “Which of the following...”, it makes no sense to hide the answer choices; the question would become invalid. The thumbnail below illustrates such a question.



Depending on the grade and subject area, Problem-Attic can successfully convert about 60–70% of its multiple-choice questions into free-response. For the others, an internal flag is set which disallows hiding.

The internal flag makes the “Hide choices” option very safe—but not perfect. You can apply the option to an individual problem or entire document and not worry about invalidating anything. If the author/editor of a problem thought that choices were required, then the flag will have been set and the problem will remain “as is”.

**Important:** Choices are never removed from a thumbnail. The “Hide Choices” option does not take effect until you click the Preview button. That is when problems are actually pulled out of the database and added to your document.

Authors and editors make mistakes, of course. When it comes to hiding choices, they may be a little too strict or too lenient. Also, with certain kinds of problems, it's arguable whether choices are required. In the thumbnail above, a one-word difference—*What* instead of *Which*—may be enough to change someone's thinking about the problem.

If you don't agree with the decision of the author/editor, you have a few options. First, if choices are hidden when they shouldn't be, you can turn off the option or apply it problem-by-problem instead of document-wide. Second, you have the option to edit a problem. You can re-word it to allow hiding, or do the reverse: remove choices manually by deleting the multiple-choice block.

Another option is to change the internal flag which allows or disallows hiding. Probably this is not an option you need to be concerned about unless you do a lot of problem-writing. If so, please contact EducAide Software, the maker of Problem-Attic, and we'll send instructions. Otherwise, if you think there's a mistake, the simplest thing is to report it and we'll fix it at this end. (To report a mistake, use the Flag icon on a problem thumbnail.)

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All of us at EducAide Software hope you like the new features in Problem-Attic, and we thank you very much for being a subscriber. If you would like to provide any feedback, please send an email to [support@problem-attic.com](mailto:support@problem-attic.com). We always appreciate hearing from people who use the program.

More good things are coming! Please check your email for announcements about new question banks and other program improvements this fall.

Note: If you have a printout of this document and would like an electronic copy, you can download it from [www.problem-attic.com/resources/new-features-Sept-2013.pdf](http://www.problem-attic.com/resources/new-features-Sept-2013.pdf).