Accessing and Setting Up Maple T.A.

1. Log into Blackboard (my.unl.edu)
2. Select your class
3. In the Control Management panel, expand Course Tools
4. Click Maple T.A. Instructor Menu
5. Select *DEFAULT TEMPLATE* and click OK

⚠️ You do not need to enroll students in your Maple T.A. class
Question Repository – A Simple Multiple Choice Question

1. Mouse-over **Content Manager** and click **Question Repository**
2. Mouse-over **Questions** and click **New Question**
3. Click the **Question Type** menu and click **Multiple Choice**
4. Type a description of the question in the **Question Description** text field

- The question description is how you will identify your questions, so use meaningful descriptions: i.e., use "Plato's favorite cereal" rather than "Question 7"
- Students will not see the question descriptions, so it's okay if the descriptions give away the answer

5. Click **Next**
6. For the text of the question, type **What is 5 + 5?**
7. For the answers, type 5, 10, 15, and 20
8. Click the radio button that corresponds to the correct answer

- Maple T.A. 6 allows you to proceed without selecting a correct answer, but due to a bug you will not be able to edit the question later to fix the problem; therefore, always double-check and triple-check that you have selected a correct answer before proceeding
- The order of the answers are scrambled by default; click "No" if you don't want them scrambled

- Generally it is better to scramble the answer choices, except when you have answer choices like "all of the above"
- Note that the answer choices are not labeled, so you should not use answers like "both a and b"; instead you will have to say something like "both the first and second choices are correct" or "Plato liked both Cap'n Crunch and Boo Berry"

10. Click **Finish**

- You are not actually finished at this point – the question has not yet been saved!
11. Select one or more questions groups into which you wish to place your new question; if you need to create a new group, click the context menu icon (the right-facing arrow) to the right of the name of your course in the question group tree, then click **Add Group**

**Tips:** Questions can be assigned to multiple question groups; assigning a question to multiple groups does not create multiple instances of that question

12. Click **Submit**

**Tips:** Questions are saved individually as they are created – you do not need to save your question groups

13. Try out your question – select an answer and click **Grade**

**Breadcrumbs**

1. Maple T.A. displays a breadcrumb trail showing where you are – this is displayed near the top of your browser window, underneath Blackboard's tabs and breadcrumbs – it may look like:

   **CLASS HOMEPAGE > QUESTION REPOSITORY > NEW QUESTION**

2. When editing or creating questions, to return to the Question Repository click **Question Repository** in Maple T.A.'s breadcrumbs – this will return you to whatever question group(s) you had been viewing

3. If you instead return to the Question Repository by mousing-over **Content Manager** and clicking **Question Repository**, no question groups will be selected

4. If had not selected any question groups in the Question Repository, none will be selected when you return even if returning via the breadcrumbs
Question Repository – Adding and Searching Groups

1. To view the question in a Question Group in the Question Repository, mouse-over that group's context menu and click **Search**
2. To create a new group, mouse-over the context menu for the group into which you want to place the new group (or mouse-over the context menu for the Maple T.A. class if you want to create the group at the root level)
3. A group can contain questions, sub-groups, or both

- The organization of your questions can affect your ability to move content from one Maple T.A. course to another
- The best way to move content is to create and export/import Course Modules; however, while the Question Repository allows for multiple levels of nested question groups – groups within groups within groups – course modules do **not**
- When question groups that have not been organized in the "right" way are exported from one course and imported into another, the desired structure will be lost and reorganization will be necessary
- Therefore, it is recommended that Maple T.A. users create question groups that mimic the structure of the old EDU question banks – a "container" question group that itself contains no questions, with one level of sub-groups that do contain questions
- The recommended question group structure would look like this (the numbers in parentheses indicate the number of questions in each group):

```
Chapter 1 (0)
  Topic 1 (3)
  Topic 2 (5)
  Topic 3 (2)
Chapter 2 (0)
  Topic 1 (7)
  Topic 2 (3)
  Topic 3 (5)
```
Question Repository – Deleting Groups

1. Mouse-over a group's context menu and click **Delete Group**
2. You cannot delete groups that contain sub-groups – you must first delete the sub-groups
3. When you delete a question group, you are not deleting the questions within that group – if the questions within a deleted group were not also in other groups, they will be moved to the **Questions not in groups** area of your Question Repository

Question Repository – Deleting Questions

1. To delete some questions from a question group, first view the questions in that group by mousing-over the context menu for that group and clicking **Search**
2. Or, to delete questions not in groups, click **Questions not in groups**
3. By default, ten questions are displayed per page; you can page through the questions to find the question(s) you want to delete, or you can change the **Questions Per Page** setting below the question group tree to a higher value so that all questions are displayed on a single page
4. Select the question(s) you want to delete
5. Click the **Delete** button
6. Deleted questions are not deleted permanently – they are moved to the **My Deleted questions** area of your Question Repository

Question Repository – Deleting Questions Permanently

1. As a safety measure, deleted questions are not actually deleted – they are moved to the **My Deleted questions** area of your Question Repository
2. To view "deleted" questions, click **My deleted questions**
3. To permanently delete some questions, select the ones you want to delete permanently, then click **Permanently Delete**
4. To permanently delete all questions in the **My Deleted questions** area, click the **Cleanup** button
Question Repository – A Multiple Choice Question with Algorithms

1. **Search** the question group that contains the question you just made
2. Click that question's **Clone** button
3. Click the new question's **Edit** button
4. Click **Edit**
5. Type a new description
6. Click the **Add** button for **Algorithm**
7. Click **Show Designer**
8. In the first **var** field, type \( x \)
9. In the first **expr** field, type \( 1 \)
10. In the second **expr** field, type \( 9 \)
11. In the **in steps of** field, type \( 1 \) (or leave blank)
12. Click **OK**
13. Click **Hide Designer**
14. Click **Refresh** to test your variable and to verify that the code generates only desirable values
15. Use the algorithm designer to create a variable named \( y \) that has the same parameters as \( x \), or type the necessary code to generate such a variable on the line below the code for \( x \)
16. Click the **Refresh** button to see the various values that can be generated for both variables
17. On a blank line below the code for generating \( y \), type \( \text{$ans = $x + $y;} \)
18. Click **Refresh** a few times – does \( \text{ans} \) always equal \( x + y \)?
19. Click **Save**
20. Click **Next**
21. In the text of the question, delete the first \( 5 \) and type \( x \)
22. Delete the second \( 5 \) and type \( y \)
23. In the answer field that is selected as the correct answer, delete the current answer and type \( \text{$ans} \)
24. Click **Finish**, then click **Submit**
25. Select an answer and click **Grade**, doing this a few times to test the question

⚠️ Do you foresee any problems with this question?
1. Click **Edit**
2. Click the **Edit** button for **Algorithm**
3. To create randomized distractors, add the following lines of code:
   a. `$d1 = range(1,20);$
   b. `$d2 = range(1,20);$
   c. `$d3 = range(1,20);$
4. Click **Show Designer** (if necessary)
5. For **Ensure the variables always satisfy this condition**, type `ans`, select does not equal, and type `d1`
6. Repeat for `d2` and `d3`
7. Also ensure that `d1` does not equal `d2` or `d3`, and that `d2` does not equal `d3`
8. Click **Hide Designer**
9. Click **Refresh** a few times – the correct answer and the distracters should now always be unique
10. Click **Save**
11. Click **Next**
12. Type `$d1`, `$d2`, and `$d3` in the answer fields that contain numbers
13. Click **Finish**, then **Submit**
14. Test the question

⚠️ Using algorithms, you can create a single question that either lets students practice a skill over and over, or ensures that test takers can’t cheat

⚠️ Algorithms are powerful, but risky – what if we hadn’t realized that we needed to add conditions to ensure that the correct answer never equaled one of the distracters?

⚠️ Is Multiple Choice the right question type for math problems?
Question Repository – Algorithms Part 3

1. Add a new question
2. For Question Type, select Numeric
3. Type a description
4. Click Add button for Algorithm
5. Type:
   a. $x = \text{range}(1,9);$
   b. $y = \text{range}(1,9);$
   c. $\text{ans} = x + y;$
6. Click Save
7. Click Next
8. For the text of the question, type What is $x + y?$
9. For the correct answer, type $\text{ans}$ in the Number field
10. Click Finish, select a question group, then click Submit
11. Test the question

Question Repository – Question Designer

1. Create a new question
2. For Question Type, select Question Designer
3. Click Next
4. Type a question and press Enter
5. Click the last button in the third row of buttons – Insert/Edit Response Area
6. Select the appropriate question type for your question

⚠️ Currently there are problems with the Multiple Choice and List response types

⚠️ The Multiple Choice response type cannot be used at all because the response area editor will not advance to the second screen that allows you to select the correct answer

⚠️ The List response area will work, but the drop-down list will display some extra garbage along with the "Click to select" message
7. Enter the appropriate information for your answers, click OK when necessary
8. Click Finish, select a question group, then click Submit
9. Test the question
10. Click Edit, then Next
11. Type a second question
12. Add a Response Area for the second question
13. Click Finish, select a question group, then click Submit
14. Test the question

Use the Question Designer when you have a group of related questions, especially when they are based on the same set of data

The Question Designer is the only way to present a group of questions that are based on the same algorithmic-generated data

Question Repository – Using JPG and GIF Graphics

Filenames may only include the following characters: a-z, A-Z, 0-9, - (hyphen), _ (underscore), and a single period that is not the first or last character

Only 32 characters may come before or after a period

There are many other characters that can be used in filenames on Mac and Windows computers, but any characters other than those listed above should NOT be used

Maple T.A. is inconsistent in its enforcement of filename restrictions, and you may be able to upload individual files with characters not listed above – however, you will encounter problems later when exporting and importing course modules, so please take care to use the above conventions when naming files to be uploaded to Maple T.A.

1. Mouse-over Content Manager and click Website Editor
2. Click upload file(s) to this point
Create subfolders by clicking the Create new subfolder icon to better organize your graphics.

To upload to a folder, mouse-over the folder, then click the Upload to this point icon.

3. Click the Browse button, locate your graphic and click Open.
4. Select Single File and click OK.

If you have multiple files to upload, you can zip them and upload the zip file – just choose Zip Archive in Step 3.

5. Return to the Question Repository.
6. Create a new question or edit an existing question.
7. On the screen that lets you edit the text of the question, click the second button in the third row of buttons – Insert/Edit Image.
8. Click Browse Server.
9. Select the desired graphic and click OK.
10. Click Finish, select a question group (if necessary), then click Submit.

You can also upload a graphic using the Insert/Edit Image button, by clicking the Upload tab.

Maple T.A. only allows the uploading of JPG, GIF, and PNG graphics.

Other graphic types (although ideally these would be converted to JPG, GIF, or PNG), PDFs, and Powerpoint presentations can only be used within questions/assignments by storing the files elsewhere.
External Graphics

1. The most convenient way to store files external to Maple T.A. is to use the resources provided by Blackboard: graphics can be placed either in content areas within your course, or in your own personal Content Collection area that is not tied to any specific course.

2. To activate your Content Collection area, you must complete online training – begin by going to http://itg.unl.edu/workshops/cms.shtml.

3. Link to graphics in your Content Collection area with caution; you must give the right type of permission to your graphics for them to be accessible to students (click the Permissions button for the folder that contains your graphics, then click the Permit Anyone button, select Read and Overwrite and click Submit), and spaces in folder names can cause problems.

Question Repository – Linking to Graphics in Content Areas

1. Click the left-most link in the breadcrumbs to return to your Blackboard course.
2. Mouse-over the + button above the course menu and click Create Content Area.
3. Type a name.
4. Do not select Available to Users.
5. Click Submit.
6. In your course menu, click the new content area.
7. Click Create Item.
8. Type a name – multiple files can be attached to a single item, so you could simply call your item "Graphics" or "Graphics for Exam 3".
9. Under Attach or Link Content, for Attach Local File, click Browse.
10. Locate the desired graphic(s) and click Open.
11. Click Submit.
12. Additional graphics can be attached to this item, one at a time.
13. Mouse-over the link to your new graphic, right-click, and click Copy Shortcut.
14. Return to your Maple T.A. Question Repository
15. Create a new question or edit an existing question
16. Click the **Insert/Edit Image** button
17. Click within the text field for **URL** and press **Ctrl-V** to paste the copied URL
18. Click **OK**
19. Click **Finish**, select a question group (if necessary), then click **Submit**
Assignments – Part 1

1. Mouse-over Content Manager and click Assignments
2. Click New
3. Type a name for your assignment
4. Click 2. Select Questions
5. Select a question group
6. If a group does not contain any questions but only contains sub-groups, you must select the sub-groups and not the main group, as Maple T.A. considers the main group to be empty
7. Click Add as Items
8. Click 4. Review and Finish
9. Click Finish
10. In the breadcrumbs, click CLASS HOMEPAGE
11. Click the new assignment
12. Answer any questions you wish to answer, using the Back and Next buttons to switch between questions
13. Click Grade when finished, then click Quit and Save or close the window

Tips:

- Use Add as Items when creating assignments if you want students to receive every question in the assignment
- Maple T.A. assignments do not become available to students until links to them have been added to Blackboard – you are free to create assignments without having to worry that students will access them before you are ready

Assignments – Part 2

1. Mouse-over Content Manager and click Assignments
2. Click your assignment
3. Click 2. Select Questions
4. Click the Select All checkbox and click Delete
5. Select a question group
6. Click the checkbox for the question group and click Add as Group
7. Click the name of the newly added question group and type a new name, if desired
8. For Randomly pick # of # questions in this group, select a number that is less than the total number of questions in the group
9. Click Review and Finish, then click Finish
10. Try the assignment

① Use Add as Group when creating assignments if you only want students to receive a subset of all of the questions in a topic

① Questions in a group will always be presented in random order, even when Scramble questions is not selected

① An assignment can use a mix of Add as Items and Add as Group

Example #1: When an assignment consists of a group of questions from which \( n \) questions are selected, followed by individual questions, and when Scramble questions IS NOT selected, each assignment will consist of \( n \) questions from the group of questions in random order followed by the individual questions in the order in which they are listed in the assignment

Example #2: When an assignment consists of a group of questions from which \( n \) questions are selected, followed by individual questions, and when Scramble questions IS selected, each assignment will consist of \( n \) questions from the group of questions and all of the individual questions in random order – i.e., the first question in the assignment may be one of the individual questions

① When creating question groups, you should always be thinking about how you will want to structure your assignments – i.e., if you want the assignment to consist of five questions from a group of ten, plus five other specific questions, put the first ten questions into one group and the other five into another
Poor Man’s Randomization

You have seen how to use algorithms to create dynamic questions and answers. Algorithms can be confusing for those with little programming experience, and difficult to employ in non-math questions.

Try creating variations on a question in a single question group, then adding that group to an assignment and telling the assignment to select a single question from that group. This is an easy way to create some degree of randomization for any kind of question.

I.e., a question will present a table of data, but one student’s question will be about the price of apples while another student’s question will be about the price of pears.

A drawback to this approach is that if you need to make a change to a part of the question that is common to all variations, you will need to make the change in each variation.

Consider using a graphic to present the common information – then if a change is required you will only need to change a single graphic.

Assignments – Set Policies

Assignment Types

**Practice** assignments are not recorded and you will not know who has taken them and who hasn’t. Students complete the entire assignment before receiving a score.

**Homework/Quiz** assignments are recorded. Students can take homework/quiz assignments on any computer with no oversight. (Using a time limit to reduce students' ability to look up an answer or call a friend.)

**Proctored Exam** assignments are recorded and require proctor authorization to start and to grade. These exams are administered in the Arts and Sciences Testing Center in 127 Burnett Hall. (Use a generous time limit to provide flexibility in case of technical problems.)

**Mastery Dialog** assignments are recorded and allow you to control student progression through the assignment – i.e. they must “master” the first group of questions before proceeding to the second group.
Student Session Dialog assignments are not recorded. Students are told after each question if their answer was correct or incorrect, and they will have the option of trying the question again before proceeding to the next question.

Restricting Feedback
It is highly recommended to use the restrict feedback until setting to restrict "feedback" (the ability for students to view their graded assignments) until after an assignment’s deadline. If students can view their graded assignments before the assignment’s deadline, they will be able to print them out and share them with their classmates. Set the start and end dates/times first, then select the restrict feedback until checkbox – the date will automatically be set to the end date/time of the assignment.

Other Settings
Passing Score: You would only set a passing score if you wanted to control access to one assignment based on whether the student had passed another.

Time Limit: Exams administered in the Testing Centered are limited to 120 minutes. Time limits are most useful for non-proctored assignments, as a fairly tight time limit will restrict students' ability to look up answers. For proctored assignments, any time limit should be fairly loose so that any technical problems will not prevent a student from completing their assignment.

Questions per Page: It is highly recommended that you keep the default setting of one question per page. A student’s answers are only saved when they navigate to another page. Therefore, the more questions that are on a page, the more work they can lose if something goes wrong. If you need to present a group of related questions on the same page, use the Question Designer question type.

Max attempts allowed: If the dropdown menu is grayed out, it’s because advanced criteria for the assignment have been set. Click the Advanced button under the tabs. If there are criteria there that shouldn’t be there, remove them. If you use any advanced criteria and you also want to set a maximum number of attempts, you will have to add that setting via an advanced criterion.
Assignments – Force-Grading

There always seem to be a few students who click Quit and Save rather than Grade when completing their assignment. Therefore, the following procedure will usually need to be followed after the deadline of each assignment.

Go to the Assignments page. If the most recent assignment still has active attempts, there will be a padlock icon in front of it, and there will be a number other than zero in the Active column.

To force-grade any active assignments, click the number in the active column. You will then see a table of the active assignments. You will also be told if there are any assignments that cannot be force-graded because the student is still online – if this is the case, wait three hours before force-grading.

Click the Force Grade button to force grade all active assignments.

The scores for force-graded assignments are not automatically sent to Blackboard.

To send all of an assignment's scores to Blackboard:

1. Mouse-over Gradebook and click Open
2. Select an assignment
3. Click the Submit button
4. Click the Export button that is now displayed next to the Submit button
5. You should receive a message saying "X of X scores have been exported to Blackboard." If instead you receive an error message, please call me.

Assignments – Deleting/Editing Questions

The new version of Maple T.A. does not allow you to permanently delete questions that are used by assignments. To remove an unwanted question from an assignment, edit the assignment and remove the question. You may then permanently delete the question from the Question Repository if you desire.

Questions can be edited at any time – even when an assignment is in-use by students.
Adding Maple T.A. Assignments to Blackboard

1. Return to your Blackboard class
2. Click a content area
3. Turn **EDIT MODE** on
4. Mouse-over More and click **Add Maple T.A. Assignment**
5. Select the desired assignment and click **Submit**
6. Click **OK**

Copying Maple T.A. Content From One Class to Another

1. In the class from which you wish to copy Maple T.A. content, go to the Maple T.A. Instructor Menu
2. Mouse-over **Content Manager** and click **Course Modules**
3. Click **New**
4. For each type of content (Question Banks, Assignments, Web Folders), click **Select all** and then click the right arrow button to add that content to the Selected pane

> It is permissible to export only part of your course

> However, it important that if you include any assignments in a course module, you must also include the question group(s) used by those assignments – otherwise the assignments will lose their links to the questions, regardless of when those questions are imported into the new course

> For this reason, it is safest to always export and import all content

5. If this is a Spring 2010 course or earlier, find the question groups called **Maplesoft Question Bank** and **WBA Question Bank** in the selected pane, select them, and click the left arrow button to remove them from the course module

6. When all web folders are selected, only **web_folders** will be added to the **Selected pane**, regardless of the number of subfolders, as this is the root web folder and all subfolders are contained within
7. On the next page, enter a name for your course module – you do not need to type anything in any of the other fields on this page.

8. Click **OK**

9. Click the checkbox to the left of the course module you just created

10. Click **Export**

11. On the following screen, click **OK**

12. The following web page will flash while your course module is created – the creation process can take anywhere from a few seconds to a few minutes

13. When your course module is ready, you will see the message "Your course module is now ready for download. Click here to start the download." – click the link, then follow the prompts to save the file to your computer

14. If you are using a Mac, the downloaded course module may be automatically unzipped – if this happens, go into the folder that the course module contents are extracted into (you should see the file `manifest.xml` when you are at the root of the course module) and re-zip all of the course module files and folders into a single zip file

15. Go to the class that you want to copy your Maple T.A. content into

16. Go to the **Maple T.A. Instructor Menu**

17. Select *DEFAULT TEMPLATE* as the template for your class

18. Mouse-over **Content Manager** and click **Course Modules**

19. Click **Import**

20. Click **Browse**, then locate and select the zip file for your course module

21. Click **Import**

22. All content within the course module will be automatically selected by default – if there is any content that you do not want to import at this time, deselect it before proceeding

23. Click **Install**

24. Verify that your imported content still works – preview questions and "Print" assignments to ensure that any graphics are displaying correctly

If you used Blackboard's Course Copy to copy your Blackboard content, please note that any links to Maple T.A. assignments will need to be deleted and recreated as the links do not automatically update to point to your new Maple T.A. class