3: QUIZZES, QUESTION BANKS & INTERACTIVE ACTIVITIES

WELCOME TO THE QUIZZES AND QUESTION BANKS TUTORIAL!

In this tutorial, you will learn how to create:

- Question banks
- Several types of multiple-choice questions
- Cloze questions
- Drag and drop questions

If you have not used one of CareerTech's "How to Moodle" tutorials before, view the instructions for using it as a self-paced tutorial or as a resource for classroom instruction.

Before taking this tutorial, you should be familiar with:

- Setting up a course in Moodle
- Adding an activity to a topic in your course
- Writing meaningful assessment questions

To begin, select from the menu below or simply turn to the next page. We recommend you save the questions you create from this tutorial for future reference.

MENU OF TUTORIAL TOPICS

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INTRODUCTION TO MOODLE QUIZZES AND QUESTION BANKS

The Moodle quiz engine has been recognized as one of the most powerful and easy-to-use open-source computer apps in the world! Instructors can create quizzes that can be set to percentage grades, set as pass/fail, left ungraded, or taken multiple times. Because of this versatility, online quizzes can be used for formative and summative assessment, practice tests for students, and other types of interactive activities.

Moodle allows for many questions types, including:

- **Multiple-choice**—Can be set to one correct answer or several correct answers.
- **All-or-nothing multiple choice**—A multiple-choice (multiple correct) question type that requires students choose all of the correct responses in question. This question type is different than a standard multiple-choice question with several answers.
- **True/false**—Functions like multiple-choice question, but with only two possible choices.
- **Essay**—Students compose long answers to questions. Essay questions must be graded manually by the instructor.
- **Matching**—Students match the question to a set of responses either in a dropdown menu or by dragging and dropping the answer.
- **Short answer**—Students type in a word. The "short answer" can only be one word or a very short phrase that a student would most likely word correctly.

  Note: Even with an answer such as "Stop, drop, and roll," you must code all the possible correct answers, such as "stop drop roll," "stop, drop, roll" "stop, drop, and roll," "stop drop and roll," "stop, drop, & roll," "stop drop & roll" and any other possible combination that would be considered correct. For this reason, requiring students to type a sentence rarely works well for an auto-graded short answer question.

- **Cloze**—Similar to the short answer question type, but cloze questions consist of a sentence or paragraph where certain words are removed and students must provide the missing words.
- **Numerical**—Similar to a short answer question, except this question format requires students to type in a number for the response.
- **Calculated**—Similar to numerical, but the possible answer choices are drawn from a pool.

HELPFUL HINTS BEFORE GETTING STARTED

You will need some additional image files to create some of the question types in this module. We've created a zipped folder that includes all of the files you need for this training. This zipped file can be found on the ctYOU.org website by clicking "Moodle Training" in the top navigation bar of the website, and then clicking the link to the file located under the *Quizzes, Question Banks & Activities* tutorial. The zipped file contains the following images:

- barn.jpg
- color-green.png
- color-red.png
- color-violet.png

- color-wheel-outline.jpg
- drag-and-drop-house.png
- drag-and-drop-letter.jpg

To use these files, save the zipped folder to your hard drive. Navigate to the location where you saved the zipped folder. Right-mouse-click on the zipped folder and then click to extract the files. This process unzips the Moodle Quiz Tutorial folder so that you can access the individual image files.

In addition, please remember to do the following:

- Watch the video recommended for each question type before attempting the activity for the first time. The written instructions will make much more sense if you watch the video first! ☺
- Questions created in a question bank do not appear in a quiz until they've been moved into the quiz.
- If a question you have created does not appear in the question bank, you may have accidentally created it in the default area for the quiz or for the course. Check the default areas, locate the question, and then move it to the proper question bank.
- Although you can delete questions from a quiz, be careful about deleting questions from a question bank. If you do not like a particular question, simply remove the question from the quiz or edit the question.
- It is possible to import entire quizzes at one time into a Moodle course by using tests that have been formatted in MS-Word. This method requires users to format quizzes in Word in a very specific way. For example, see the YouTube video at https://www.youtube.com/watch?v=iLPVsqJYjzk. The video at https://www.youtube.com/watch?v=GsDimeannOI requires the use of the online Moodle XML Converter located at http://VLEtools.com. This converter allows users to log in using a social media account. You can locate several other conversion tools online.

Before beginning the training, set up a separate topic area in your course or training site and name it Moodle Quiz Training. This way, you can create all quizzes and question types in this tutorial in one area.

Note: The Oklahoma CareeerTech *Moodle Gradebook* tutorial require samples quizzes and assignments, so you may want to retain your quiz work for later use.

CREATING A QUESTION BANK AND SETTING UP QUESTION CATEGORIES

VIDEO DEMONSTRATION:

Watch this 7½-minute video to see a demonstration and explanation of quiz categories and questions.

https://www.youtube.com/watch?v=c1xVTHxVQVk

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

Using the Moodle Quiz activity requires specific methods for composing questions and organizing question banks. Question banks help you categorize your quiz questions.

Note: If you do not set up question banks before creating quiz questions in Moodle, your questions will be saved to the default area of your course instead of the question bank, and they often can be difficult to locate.

Follow these steps to create a **question bank** and **question categories**:

Step	Action	Notes
1.	Navigate to your Moodle course page and turn editing on.	
2.	On your course page, click the **Course Management** tab and then the **Question bank** link. The course management features may be in a different location, depending on the theme you are using.	By default, there will be no categories listed on the dropdown menu on the Question Bank page, other than the default areas. If questions have already been created, they will be listed in the dropdown.
3.	Click the **Categories** tab to create a category for your question bank.	Think about how you would like to categorize the questions in your test bank. You may choose to categorize them by unit, level of difficulty, question type, and so forth. Each question category should have a unique name or identifier.

Step	Action	Notes
4.	On the **Edit Categories** tab toward the bottom of the screen under **Add category > Parent Category**, in the dropdown menu select **Top** under your course title.	Selecting the top of your course ensures the questions can be selected easily for quizzes and tests throughout your course.
5.	Type in the name of your question bank category, such as **Sample Question Bank**, and click the **Add category** button at the bottom of the screen.	Remember, each question bank should have a unique name. Oklahoma CareerTech's CIMC uses the product number and unit numbers to identify question banks, such as AG1030 Unit 01 Test. If you'd like, add descriptive information in the Category box (however, this is not required). Students will not see the question bank name, so use a name that is meaningful to you.
6.	Add other categories as needed. When finished, make sure the new category appears underneath the **Question categories** heading for your course. Return to your main course page.	On the **Question bank** tab, make sure your new categories appear in the dropdown menu.

CREATING A QUIZ

VIDEO DEMONSTRATION:

Watch this 5 ½-minute video to see a demonstration showing how to set up a Moodle quiz.

https://www.youtube.com/watch?v=Tj3hViq_vjg

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

The following steps describe how to add a **quiz or test** to a course page.

Quizzes, Question Banks & Activities

Step	Action	Notes
1.	Turn editing on for the course.	Click the **Turn Edit On** button or link in the upper right.
2.	Under the course topic section where the quiz is to appear, click the **Add an activity** link.	
3.	On the dropdown menu that appears, click **Quiz** from the list of possible activities.	
4.	On the page that appears under the **General** section, type in a name for the quiz in the **Name** field. You can type in a description in the **Description** box.	For example, type in the name **Sample Quiz 1** in the **Name** box. The **Description** box is a good place to type instructions for completing the quiz or test. For training purposes, type: Answer all questions in the quiz. When satisfied with your answers, click the "Submit all and finish" button to exit the quiz.
5.	The remaining options on the page allow you to set the timing, grade, layout, and so forth. These features are described later in this tutorial.	Clicking the question mark icons next to these options reveals information about them. The question behavior and review options determine whether the quiz functions as a practice quiz or a quiz that's graded.
6.	At the bottom of the page, click the **Save and display** link to continue setting up the quiz.	Clicking **Save and display** reveals a page that shows no questions have been added to the quiz. You also have the option to click a button to return to the main course page.
7.	Click the **Edit quiz** button.	
8.	In the Maximum grade box, type in the point value for the quiz, and then click the **Save** button next to it.	For this exercise, enter "10" as the point value.
9.	To add a quiz question from this page, click the **Add** link and choose **a new question** from the dropdown menu.	
10.	On the popup that appears, choose the question type, and then click the **Add** button at the bottom of the menu.	For training purposes, click the radio button next to **True/False**.

Step	Action	Notes
11.	In the **General** section under **Category**, choose the category the question belongs under.	For training purposes, choose the **Sample Question Bank** category you created earlier.
12.	In the **Question name** box, type in a unique identifier that will enable you to easily determine the nature of the question, such as Sample-01-TF, which will identify the question as a True/False sample question.	Use a unique code number for each question. For example, CIMC's numbering system denotes the product number, the unit number, quiz/test, and the question number in a three-digit format with no spaces, for example AG1030-1T-001. Only those with rights to edit the course will see the question name—students will not see it.
13.	Type in a question in the **Question text** box.	For training purposes, type: In the U.S., Independence Day is celebrated on July 4.
14.	In the **Default points** box, verify the point value is set to 1.	
15.	In the **Correct answer** dropdown menu, "True."	
16.	Scroll to the bottom of the screen and click the **Save changes** button.	This will display a page that lists the questions in Sample Quiz 1. From this page, you can also add questions to the quiz from your question bank or other courses.
17.	Return to your course page by clicking the title of your course in the breadcrumb at the top of the screen.	

ADDING A MULTIPLE-CHOICE QUESTION TO A QUIZ

VIDEO DEMONSTRATION:

Watch this 4-minute video to see a demonstration showing how to add a multiple-choice question to a Moodle quiz.

https://www.youtube.com/watch?v=tsnHSRpARrU

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

The following steps describe how to add a multiple-choice question to a quiz.

Step	Action	Notes
1.	From the course page, click the link for **Sample Quiz 1** that you created earlier.	
2.	Click the **Gear** icon and choose **Edit quiz** on the menu. This setting may be in a different location, depending on the theme you are using.	This takes you to the **Editing quiz** page.
3.	Click the **Add** link in the space where you would like to add the new multiple-choice question, and click to add **a new question**.	
4.	On the popup that appears, click the radio button to add a **Multiple choice** question, and click **Add** at the bottom of the menu.	
5.	At the top of the **Adding a Multiple choice question** page, verify the correct category appears in the Category dropdown menu.	For training purposes, choose the **Sample Question Bank**.
6.	Type in a unique question name, such as Sample-02-MC.	Use a naming convention that is meaningful to you—students will not see the question names.

Step	Action	Notes
7.	You can add an image to the question, if you'd like. In the **Question text** editing box, click the **Insert/edit image** icon, which depicts mountains and a sun). On the popup screen, click the **Find or upload an image** link. Click the **Browse** button to locate the **barn.jpg** file included with zip file for these training module. Then click the **Upload this file** button. If you wish to rename the file, you may do so. Avoid using spaces in the file name. Instead, consider using dashes or underscores for spaces between words in a file name. Type in an accurate but succinct **Image description**, and click the **Insert** button.	For this exercise, adding an image is optional. For training purposes, if adding an image, type your school name as the author and choose Public Domain in the dropdown menu. In the Image Description box, type: Barn and Silo. The best protocol for naming an image is to use a one-word name and extension, such as "barn.jpg." Avoid using spaces in the file name, such as "barn drawing.jpg." Accurate and concise **image descriptions** are very important for web-based images, and they are required by law for accessibility reasons. Be sure to give proper credit to the image author if the photo was located online or is one that you do not own. Do not use copyrighted images without written permission.
8.	Hit the Enter key after the image to move the cursor to the line underneath the image. Type the question in the **Question text** editing box underneath the image.	For training purposes, type in the question: Which of the following animals would most likely be found in a barnyard?
9.	Under **Default points**, assign a point value.	In this case, select 1 as the default points.
10.	Under **One or multiple answers**, select **One answer only** from the dropdown menu.	Select the multiple answers option if students are to select more than one answer that applies.
11.	Choose whether to shuffle the choices within the question. The **Shuffle the choices box** should have a checkmark by it.	By default, the answer choices will shuffle. However, for "all of the above," "none of the above," or "a and b only" type of questions, uncheck this box to ensure answer choices remain in a logical order.
12.	Type in a response for each **Choice** box, allowing for only one correct answer. Since the question has only one answer, select **100%** in the Grade dropdown menu for the correct answer. Leave the grade value at None for incorrect choices.	For training purposes, under Choice 1, type "rooster" (without quote marks), with the grade of 100% selected from the dropdown menu. For Choice 2, type "lion." For Choice 3, type "monkey." For Choice 4, type "zebra." Incorrect answers should have the Grade set to None.

Step	Action	Notes
13.	Under the section **Multiple tries**, if setting up a practice quiz, set the **Penalty for each incorrect try** to 0%.	This ensures students will not be penalized for answering this question incorrectly.
14.	Click the **Save changes** button at the bottom of the screen when finished.	This sends you back to the **Editing quiz** page for your quiz.

EXPLORING THE QUIZ SETTINGS

The steps below will allow you to better understand the most commonly used Moodle Quiz settings.

Step	Action	Notes
1.	Turn editing on for the course.	Click the **Turn Edit On** button or link in the upper right.
2.	Under the course topic section where the new quiz is to appear, click the **Add an activity** link.	
3.	On the dropdown menu that appears, click **Quiz** from the list of possible activities.	
4.	On the page that appears under the **General** section, type in a name for the quiz, such as **Sample Quiz 2**.	You can type in a description in the **Description** box (such as instructions for the student).
5.	**Section:** General **Field:** Display Description on course page Most often, this box is left unchecked.	If you check the box, the message you typed in the Description box will appear on the course page below the quiz name. If you do not check this box, only the quiz name will appear on the course page. The quiz description will still display when the student clicks to open the quiz.

Step	Action	Notes
6.	**Section:** Timing **Fields:** Open/close the quiz You may set an open (start) and close (finish) time, if you so choose. This is not required. Be aware that the quiz feature on your Moodle server may use military time (a 24-hour clock).	When setting the timing on a quiz to open and close for a certain class period, in addition to enabling the times for the quiz to open and close, also enable and set a time limit (for example, 50 minutes). The time on the learning management system may be a few minutes different from the time showing on the clock in your classroom. To compensate for this, you may need to adjust the quiz time in the appropriate direction by a few minutes, or add a few minutes of cushion to either the opening or closing time of the quiz.
7.	**Section:** Grade **Field:** Grade category Select the desired gradebook category from the dropdown list.	This determines the gradebook category where the score will appear.
8.	**Section:** Grade **Field:** Grade to pass Choose the desired minimum grade.	This sets the minimum passing grade and affects activity and course completion.
9.	**Section:** Grade **Field:** Attempts allowed Use the dropdown to determine the number of attempts that are allowed.	For a practice quiz, select Unlimited to allow students to take the quiz many times. For a test that will count as a grade, set the attempts allowed to 1 (or the number of attempts you choose to allow).
10.	**Section:** Grade **Field:** Grading method This option is only available if multiple attempts are allowed.	If students will be allowed to go through the quiz many times, you may want to set the **Grading method** to **Highest grade** or **Average grade**.
11.	**Section:** Layout **Field:** New page Use the drop-down to determine the number of questions allowed on each page.	The **New page** setting determines the number of questions per screen. Having one or two questions per screen is typical for long tests. The navigation menu on the course screen allows students to view any question on the quiz.

Step	Action	Notes
12.	**Section:** Question behavior **Field:** Shuffle within questions You can select Yes to shuffle the answers choices within a question to discourage cheating. Otherwise, you may want to leave the layout as shown on the screen.	If you have "all of the above" or "none of the above" type questions, choose No.
13.	**Section:** Question behavior **Field:** How questions behave This setting determines the way students interact with the questions.	Select the choices to fit your situation. **Adaptive mode** allows students to check their answers before finishing the quiz. **Adaptive mode (no penalties)** allows students to guess an answer without penalty. **Deferred feedback** allows students to check their answers only after finishing the quiz.
14.	**Section:** Overall feedback **Fields:** Grade boundaries/Feedback text fields This step is optional, but recommended to provide valuable feedback to students.	In the **Grade boundary 100% Feedback** box, you may type in the message the student will see when they get all of the answers correct. If students earn below a certain percentage, you may type in the critical percentage and the message students will see. Multiple percentage levels can be set.
15.	**Section:** Common module settings **Field:** Availability Choose to Show or Hide the quiz. You may change the setting at any time.	You can also choose to make the quiz available but not shown on the course page to make the course site appear less cluttered. If using this option, you must provide a link to the quiz from somewhere else such as a Moodle page, but the quiz still appears in the gradebook.
16.	**Section:** Common module settings **Field:** ID number Enter an ID number if desired.	Setting an ID number provides a way of identifying the activity for grading purposes. If the activity is not included in any grade calculation, you may leave the ID number field blank.

Step	Action	Notes
17.	**Section:** Common module settings **Field:** Group mode Using the **Separate groups** setting, students cannot see other students who are not in their immediate group. **Visible groups** allows instructors to assign students to work groups, but students see everyone in the course.	For training purposes, use the **No groups** setting. The ability to use groups is set in the course settings. Group settings allow an instructor to assign students to small groups, which works well for large classes. In addition, Groups may be used by an instructor who teaches more than one section of the same course during the same semester.
18.	**Section:** Common module settings **Field:** Grouping A Grouping is a set of Groups.	This field only becomes active if you have enabled the Group Mode setting and students have been assigned to groups.
19.	**Section:** Restrict access > Access restrictions > Add restriction **Fields:** Activity completion If desired, select an activity from the dropdown list and the condition that must be met to allow access to the quiz.	This set of fields ensures students can only access the quiz after completing certain activities. For training purposes, leave this option at the default.
20.	**Section:** Restrict access > Access restrictions > Add restriction **Fields:** Date You must also add the date and time for the restriction.	This set of fields allows students to view and access the quiz only during the specified timeframe. For training purposes, leave this option at the default.
21.	**Section:** Restrict access > Access restrictions > Add restriction **Fields:** Grade If desired, select an activity from the dropdown list and an acceptable grade range that must be met to allow access to the quiz.	These fields allow you to specify any grade conditions from other parts of the course that must be met prior to accessing the quiz. You may set multiple grade conditions. If you do, students can only access the quiz after meeting all grade conditions that you specify.
22.	**Section:** Restrict access > Access restrictions > Add restriction **Fields:** User profile Select a field and a logical condition that must be met for the user to access the quiz.	You can restrict access to the quiz based on any field from a user's profile.

Step	Action	Notes
23.	**Section:** Restrict access > Access restrictions > Add restriction **Field:** Restriction set This allows instructors to set restrictions within restrictions.	This setting is recommended only for experienced Moodle users.
24.	**Section:** Activity completion **Field:** Completion tracking Select the desired completion tracking status from the dropdown list.	The user will see a checkmark next to the activity name on the course page when the activity is complete, if tracked. Activity completion can be tracked manually by the student, automatically based on certain conditions, or not at all. Multiple conditions may be set. If so, the activity will only be considered complete when all conditions are met. For training purposes, do not indicate activity completion.
25.	**Section:** Activity completion **Field:** Require view/grade Click the appropriate boxes to enable if you are tracking completion with the system in any of these ways.	These conditions can be used if completion tracking is set as "Show activity completion when conditions are met." You can check one, both, or none of these items. Based on the items checked, the quiz will be marked complete only when the student views the quiz or the quiz is graded.
26.	**Section:** Activity completion **Field:** Expect completed on If you check the **Enable** box for this field, you must also enter an appropriate date.	This field specifies the date when the activity is expected to be completed. The date is not shown to students and is only displayed in the activity completion report.
27.	Click **Save and display** at the bottom of the page.	The link has now been created from the course to the quiz.
28.	On the next screen, click the **Edit quiz** button.	
29.	Click the small **Add** link to add a question to your quiz, and click **a new question** on the menu that appears.	A popup window will appear on which you will select **a new question**, in this instance.

Step	Action	Notes
30.	Click the radio button next to **Multiple-choice** question, and click the **Add** button.	The multiple choice question type assigns partial credit in "multiple correct" questions if the student chooses some but not all correct responses. If you want students to select all correct responses with no partial credit given for only selecting some of the correct responses, choose the **All-or-nothing** question type.
31.	Under the **General** settings, click the dropdown menu to ensure the category for the course is selected for this example.	
32.	Type in a question name using the previously determined naming convention.	For training purposes, type: Sample-03-MC.
33.	Type the quiz question in the **Question text** editing block.	Compose a question that has two correct answers. For training purposes, type: Which of the following are major cities in Kansas?
34.	Make the appropriate selection in the **One or multiple answers** dropdown menu.	Since this question will have two correct answers, select **Multiple answers allowed**.
35.	In the **Choice 1** box, type in the first correct answer and select 50% as the grade for a question with two correct answers (33.33% for a question with three correct answers, 25% for a question with four correct answers, and so forth).	For training purposes, type **Wichita** and select 50% as the grade.
36.	In **Choice 2** box, type the second correct answer and select 50% as the grade for a question with two correct answers (33.33% for three correct answers, etc.).	For training purposes, type **Topeka** and select 50% as the grade.
37.	In **Choice boxes 3 and 4**, type in the distracters and set the grade for the incorrect answers to **None**.	Under Choice 3 and 4, type **Cleveland** and **Denver** as distracters, and set the grade for the incorrect answers to None.
38.	Set the other features to suit your preference, and click the **Save changes** button at the bottom of the screen.	Your new question now appears in the default question bank for your course, but the question is not yet in your quiz.

Step	Action	Notes
39.	Preview the new multiple-choice question by clicking the **magnifying glass** icon.	Notice the answers have been randomized. Clicking the **Fill in correct responses** button verifies you formatted the answers correctly.
40.	Verify that all three question created so far appear in the Sample Question Bank. To do so, click the **Course Management** tab and then the **Question bank** link.	
41.	On the page that appears, select the **Sample Question Bank** category from the dropdown menu, and check to see how many questions are in the question bank.	
42.	Now, select the **Default** for your course from the category dropdown menu, and check to see how many questions are in the default question bank for your course.	
43.	To move any stray questions to the Sample Question Bank, click the checkboxes to the left of the question(s).	
44.	Under the **With selected** heading, choose the **Sample Question Bank** from the dropdown menu, and then click the **Move to** button.	This places the questions in the Sample Question Bank category. Notice that the number in parenthesis after the category name shows the number of questions in that category.
45.	Return to the course page and click the link to the new quiz (in this case, Sample Quiz 2).	
46.	On the page that appears, click the gear icon, and then click the **Edit quiz** link.	
47.	Click the **Add** link and click **from a question bank** in the dropdown menu, and choose the Sample Question Bank from the dropdown menu.	You can also navigate to your course default questions.
48.	Click the checkbox next to the questions you wish to add to the quiz, and then click **Add selected questions to the quiz**.	The questions remain in the question bank and can be used in multiple quizzes.

Remember, if you want to require students to select all of the correct responses in a multiple-correct question, choose the All-or-Nothing question type.

Note: The All-or-nothing question type is a Moodle plugin, and you may need to request that your server administer install it.

ADVANCED QUESTION TYPE: CLOZE QUESTIONS

VIDEO DEMONSTRATION:

Watch this 11-minute video to see a demonstration and explanation of the Moodle cloze question type.

http://www.youtube.com/watch?v=shK7fyh3_Rw

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

A cloze question can be fill-in-the-blank, multiple-choice with a list of possible answers, numerical, or a combination of multiple cloze question types all in one question. Although effective, cloze questions are used less frequently because the answer choices require special coding. Don't let this prevent you from using this type of question—cloze questions are easy to code!

CREATING A CLOZE QUESTION WITH ONE ANSWER

Follow the steps below to create a cloze question with one answer choice.

Step	Action	Notes
1.	To add cloze questions to an existing question bank, at your course home page on the **Course Management** tab, click the **Question bank** link.	The location of this link may vary, depending on the theme on your Moodle site.
2.	On the **Question bank** page, make sure the correct category appears in the dropdown menu, and then click the **Create a new question** button.	For training purposes, select the **Sample Question Bank** you created earlier.

Step	Action	Notes
3.	From the popup window, click the radio button next to **Embedded answers (Cloze)**, and then click the **Add** button.	
4.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-04-C.
5.	The cloze question format requires a little bit of programming code (see the example in the column to the right). In the **Question text** editing box, along with the question, add the following code: • an open squiggly bracket { • the number of points the question is worth • a colon • SA (or singleanswer spelled out with no spaces; this is the question type) • a colon • an equal sign • the answer • a closed squiggly bracket }	For this example, start with a cloze question that requires a one-word answer. For training purposes, type the following sentence exactly as follows: **This quiz question demonstrates the {1:SA:=cloze} question type.** As noted in the code, the answer to the above single-answer, 1-point question is the word "cloze." The question coding is case sensitive.
6.	Click the **Decode and verify the question text** button to check your coding.	If you typed something incorrectly, you will see a red error message.
7.	Click the **Save changes** button at the bottom of the page if the question was coded correctly, and return to the **Question bank** screen.	
8.	Click the **magnifying glass** icon next to your question to view it.	
9.	When viewing the question, click the **Fill in correct responses** button to ensure the question and answer were typed correctly.	
10.	On the **Question bank** page, click the checkbox to the left of the question and move it to the **Sample Question Bank**, if necessary.	As you may have noticed, the name of questions that have not been assigned to a question bank appear light gray in color.

CREATING A NUMERICAL CLOZE QUESTION WITH SEVERAL ANSWER CHOICES

Step	Action	Notes
1.	From the **Question bank** screen, click the **Create a new question,** choose **Embedded answers (Cloze)**, and then click the **Add** button.	Make sure you are in the correct category for your quiz.
2.	Name the question according to your established naming convention.	For training purposes, name the question Sample-05-C.
3.	Type your question in the question editing box. When typing in the code, separate the answer choices using a tilde symbol (~). An equal sign designates the correct answer. The multi-answer cloze question type uses the following abbreviations for question types: • **MCV** – multiple-choice vertical (displays choices vertically) • **MCH** – multiple-choice horizontal (displays choices horizontally) • **MC** – dropdown box (displays choices in a dropdown box) • **NM** – numerical answer	For training purposes, type the following sentence exactly: **If an item is "free," the cost is {1:MCV:$100~$1~=$0~$25}.**
4.	Click the **Decode and verify the question text** button to check your coding.	If you typed something incorrectly, red text will appear.
5.	Click the **Save changes** button if the question was coded correctly, and return to the **Question bank** screen.	
6.	Click the **magnifying glass** icon next to your question to view it.	
7.	When viewing the question, click the **Fill in correct responses** button to ensure the question and answer choices were typed correctly.	
8.	Make sure the question appears in the correct question bank.	If it is not in the question bank, move it at this time.

CREATING A MULTIPLE-ANSWER CLOZE QUESTION

Follow the steps below to create a cloze question with multiple answers in a question bank.

Step	Action	Notes
1.	On the **Question bank** page, click the **Create a new question** button, choose **Embedded answers (Cloze)**, and click the **Add** button.	For example, use the Sample Question Bank you set up earlier.
2.	Name the question according to your established naming convention.	For training purposes, type Sample-06-C.
3.	Type in the question code text in the editing box. Use the following abbreviations to designate question types: • **MCV** – multiple-choice vertical • **MCH** – multiple-choice horizontal • **MC** – dropdown box • **NM** – numerical answer	For training purposes, type the following: **Ears of corn grow on a: {1:MCH:stock~=stalk~stick~stump}.** **The hierarchical rank of organisms is Kingdom, Phylum, {1:SA:=Class}, Order, Family, Genus, {1:SA:=Species}.** **Poison oak usually can be identified by the number of leaflets. As the saying goes, "Leaves of {1:NM:=3}, let it be."**
4.	Click **Decode and verify the question text** to check your coding.	
5.	Click the **Save changes** button if the question was coded correctly, and return to the **Question bank** screen.	
6.	Click the **magnifying glass** icon next to your question to view it.	
7.	When viewing the question, click the **Fill in correct responses** button to ensure the question and answer choices were typed correctly.	If you edit a previously saved multiple-answer cloze question, under the heading The Question Will be Saved as Edited, click to confirm you want to resave the question.
8.	Make sure the question appears in the correct question bank.	If it is not in the question bank, move it at this time.

Note: The cloze question type can be used to create a unit review. Consider using longer passages of text!

ADVANCED QUESTION TYPE: DRAG AND DROP QUESTIONS AND ACTIVITIES

> VIDEO DEMONSTRATION:
>
> Watch this 6-minute video to see a demonstration showing how to create a drag and drop question for a Moodle quiz.
>
> http://www.youtube.com/watch?v=qjmE-g3JNUI
>
> **Note:** Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

CREATING A DRAG AND DROP MATCHING QUESTION (OR DRAG AND DROP ACTIVITY)

The following steps describe how to create a drag and drop question in a quiz.

Step	Action	Notes
1.	On the main course page, turn editing on.	
2.	Click on the link to an existing quiz.	
3.	On the screen that appears, click the **editing gear icon** and click **Edit quiz.**	
4.	On the **Editing quiz** screen, click the **Add** link in the space where you want the new question to appear, and then select **a new question**. Click the **Drag-and-Drop Matching** radio button and click the **Add** button.	
5.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-07-DD.
6.	In the **Question text** editing box, type the instructions the students need to read in order to complete the quiz or activity.	For training purposes, type: Place the units of measurement in the proper order from smallest to largest.
7.	Set the **Default points** to reflect the value of the question.	Since the practice question will include five answers, set the Default points to 5.

Step	Action	Notes
8.	Click to deselect **Shuffle**, if you want the answers to appear in a certain order.	For this particular question, click to deselect Shuffle (no checkmark).
9.	Under the Answers heading, in each Question editing box, type in the items and answers.	For training purposes, For Question 1, type "Measurement 1 (Smallest)" with the answer "Teaspoon." For Question 2, type "Measurement 2" with the answer "Tablespoon." For Question 3, type "Measurement 3" with the answer "Pint."
10.	Click the **Blanks for 3 more questions** button to add more questions as needed.	In this example, click the button to add blanks for more questions. For Question 4, type "Measurement 4" with the answer "Quart." For Question 5, type "Measurement 5 (Largest)" with the answer "Gallon." Leave Question 6 blank.
11.	Under **Multiple tries** heading, if setting up a practice quiz, set **Penalty for each incorrect try** to 0%.	This ensures students will not be penalized for answering a question incorrectly.
12.	Click the **Save changes** button at the bottom of the page.	
13.	On the **Editing quiz** page, click the **magnifying glass icon** to preview the question you just created.	
14.	Click the **Fill in correct responses** button to ensure accuracy.	
15.	Make sure the question appears in the correct question bank. The name of questions that have not been assigned to a question bank appear light gray in color.	If any questions are not in a question bank, move them at this time. To do so, click the **Course management** tab, and click the Question bank link. Clicking the checkbox to the left of any questions in the default region of the course site. Choose the proper question bank from the dropdown menu at the bottom of the screen, and then click the **Move to button**.

CREATING A DRAG AND DROP TEXT QUESTION

This question type resembles a cloze drag and drop!

VIDEO DEMONSTRATION:

Watch this 3½-minute video to see a demonstration showing how to create a drag and drop text question for a Moodle quiz.

http://www.youtube.com/watch?v=n-DTzrHbfBQ

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

Follow the steps outlined below to create a Drag and Drop Into Text question:

Step	Action	Notes
1.	On the main course page, turn editing on.	
2.	Click on the link to a quiz you've already created.	
3.	Click the **editing gear icon** and click **Edit quiz.**	
4.	Click the **Add** link to add **a new question**, and then select the **Drag and drop into text** question type, and then click the **Add** button.	
5.	Type in a **Question name** using your previously determined naming convention.	For training purposes, type: **Sample-08-DDT**.
6.	In the **Question text** editing box, type in a cloze statement and designate the blank spaces with two square brackets. Example: [[ ]]	For training purposes, type the following exactly: Four score and [[1]] years ago our fathers brought forth on this [[2]], a new nation, conceived in [[3]], and dedicated to the [[4]] that all men are created equal**.** Notice that several words have been replaced with numbers surrounded with two square brackets on either side. These will be the answer spaces.

Step	Action	Notes
7.	Set the **Default points** to reflect the number of answers.	In the training example, since this question will include four answers, set the **Default points** to 4.
8.	In the **Choices** section, choose whether to shuffle answer choices by checking the box.	For this particular question, click to shuffle answer choices since you want the choices to appear in random order.
9.	Type the answers in the numbered choice boxes.	For training purposes, in the Choice 1 answer box type "seven" (without quote marks for this choice and all remaining). For Choice 2, type "continent." For Choice 3, type "Liberty." For Choice 4, type "proposition." For Choice 5, type "Freedom." For Choice 6, type "seventeen."
10.	Click the **Blanks for 3 more choices** button to add blanks for more choices as necessary and add the remaining answers.	For the training example, click the **Blanks for 3 more choices** button to add blanks multiple times for more choices as needed. In the Choice 7 answer box type "planet." For Choice 8, type "notion." For Choice 9, type "idea." For Choice 10, type "eleven." For Choice 11, type "proposal." For Choice 12, type "Life." For Choice 13, type "world." For Choice 14, type "thought."
11.	Click the **Save changes** button at the bottom of the page.	
12.	On the **Editing quiz** page, click the **magnifying glass icon** to view the question you just created.	
13.	Click the **Fill in correct responses** button to ensure you typed the questions and answers correctly.	
14.	Place the question in the correct question bank.	To do so, click the **Course management** tab, and click the **Question bank link**. Clicking the checkbox to the left of any questions in the default region of the course site. Choose the proper question bank from the dropdown menu at the bottom of the screen, and then click the **Move to** button.

CREATING A DRAG AND DROP MARKERS QUESTION ACTIVITY

In this exercise, you will create a quiz question (or activity) that requires the student to drag labels onto an image. You will need the **drag-and-drop-letter.jpg** file zipped with these instructions on ctYOU.org.

VIDEO DEMONSTRATION:

Watch this 9½-minute video to see a demonstration showing how to create a drag and drop markers quiz activity using the Moodle Quiz plugin.

https://www.youtube.com/watch?v=Tvl4GuGvtxc

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

Follow the steps outlined below to add a Drag and Drop Marker question to an existing question bank.

Step	Action	Notes
1.	Start by adding new question to an existing question bank in the proper category. Click the **Course Management** tab, and then click the **Question banks** link.	
2.	Choose the question bank category from the dropdown menu.	For training purposes, select the Same Question Bank.
3.	Click the **Create a new question** button, choose **Drag and drop markers** question type, and click the **Add** button.	
4.	Type in a question name using your previously determined naming convention.	For training purposes, type: **Sample-09-DDM**.
5.	In the **Question text** field, type instructions that explain what the students need to do to complete the question.	For training purposes, type the following: Drag each round target marker to the number that corresponds with its correct location on the business letter. (**Note:** Properly position the round marker, not the label.)
6.	Type in the **Default points** to reflect the number of answers in your activity.	For this example, the question is worth **4 points**.

Step	Action	Notes
7.	In the **Preview** section, upload the first image for the activity. Notice that a grid has been placed over the image. Each small square increment represents 10 pixels. The slightly thicker green lines represent 100 pixels. By looking at the lines, you can see the image is approximately 270x380 pixels.	For the training assignment, upload the file **drag-and-drop-letter.jpg**, which is available in a zipped file on ctYOU.org in the list of Moodle training tutorials. Once uploaded, the image should appear on the question's editing screen.
8.	Under **Markers**, click to enable the **Shuffle drag items each time question is attempted** feature. Type in the label for each marker.	For the training activity: • For Marker 1, type "Heading" (with no quote marks). • For Marker 2, type "Greeting." • For Marker 3, type "Body." • For Marker 4, type "Close and Signature."
9.	In the **Drop zones** section, indicate the coordinates for the markers. For a **rectangle**, first define the top left coordinate on first the x-axis (horizontally from the left edge) and then the y-axis (vertically down from the top). Then type in the length and height of the rectangle. For a **circle**, start by defining the approximate center point, x-axis (horizontally from the left edge) by y-axis (vertically down from the top). The third number indicates the diameter of the circle. A comma and a semicolon separate these numbers for both a circle and a rectangle. **Note:** The YouTube video for this question type provides clarification.	For the training activity: • For **Drop zone 1** shape, select **Rectangle**. In the Coordinates box, type: 133,30;110,50 From the Marker dropdown, select **Heading**. • For **Drop zone 2**, select **Rectangle**. In the Coordinates box, type: 18,75;110,50 Select the **Greeting** marker. • For **Drop zone 3**, select **Circle**. In the Coordinates box, type: 130,200;100 Select the **Body** marker. • For **Drop zone 4**, select **Rectangle**. In the Coordinates box, type: 120,290;130,50 Select the **Close and Signature** marker.
10.	Click the **Save changes** button at the bottom of the page.	
11.	Preview the question you created.	Click the **magnifying glass icon** next to the question.
12.	Click the **Fill in correct responses** button to ensure the questions and answers were typed correctly.	

Step	Action	Notes
13.	Assign the new question to the correct question bank. The name of questions that have not been assigned to a question bank appear light gray in color.	Clicking the checkbox to the left of any questions in the default region of the course site. Choose the proper question bank from the dropdown menu at the bottom of the screen, and then click the **Move to button**.

Now, try creating a drag and drop markers activity on your own using the **drag-and-drop-house.jpg** image. Follow the steps above and name the question **Sample-10-DDM**. Define rectangles for the chimney, window, and door markers. Use a circle to mark the bush.

CREATING A DRAG AND DROP ONTO IMAGE ACTIVITY

The ctYOU.org quiz engine includes the plugin that enables users to drag and drop images onto images. Normally, this question type requires you to prepare several images in advance. For training purposes, this tutorial includes several image files: color-wheel-outline.jpg, color-red.png, color-orange.png, color-green.png, and color-violet.png.

VIDEO DEMONSTRATION:

Watch this 4½-minute video to see a demonstration showing how to create a drag and drop activity.

https://www.youtube.com/watch?v=ZBZtPfMyMVE

Note: Video demonstrations were not created by Oklahoma CareerTech, and they may use a different version of Moodle. However, the steps are similar to the ones you will use.

Follow the steps outlined below to create a Drag and Drop onto Image question type or activity:

Step	Action	Notes
1.	Click to add a new question to your existing question bank.	Click the **Course Management** tab to access the **Question bank** link.
2.	Click the **Drag and drop onto image** question type and click the **Add** button.	

Step	Action	Notes
3.	Type in a question name using your previously determined naming convention.	For training purposes, type: **Sample-11-DDI**.
4.	In the **Question text** field, type in the instructions that students need to complete the activity.	For training purposes, type: Complete the color wheel by dragging and dropping each colored circle to its proper location.
5.	Set the default points to reflect the number of answers for your activity.	For this activity, set the default points to 4.
6.	Under **Background image**, select an image.	For training purposes, upload the file **color-wheel-outline.jpg**, which was included in the zipped file for this tutorial.
7.	Scroll down to the **Draggable items** and select to choose a file for each item in the activity.	Under **Draggable item 1**, select **Draggable image** in the dropdown menu. Add the file color-red.png. Add orange to **Draggable item** 2, green to item 3, and violet to item 4.
8.	Scroll to the **Drop zone** section. Select an image for each drop zone.	For **Drop zone 1**, select **color-red.png** in the **Draggable item** dropdown menu. For **Drop zone 2**, select **color-orange.png**. For **Drop zone 3**, select **color-green.png**. For **Drop zone 4**, select **color-violet.png**.
9.	Scroll up to view the background image. Drag each item to its drop zone.	In this case, scroll back up to view the color wheel background image. Drag each colored circle to its correct location on the color wheel.
10.	Drag the colored circles to the appropriate spaces on the color wheel.	Drag the orange circle to the space above the yellow circle. Drag the red circle to the top. Drag the violet circle to the space in the upper right. Drag the green circle to the remaining space at the bottom of the color wheel.
11.	Click the **Save changes and continue editing** button at the bottom of the screen.	Notice that the pixel coordinates have been automatically calculated in the drop zones.
12.	Click the **Save changes** button.	
13.	Preview the question to ensure the images were plotted correctly by clicking the magnifying glass icon next to the question.	As with all previous questions, remember to assign the question to a question bank.

SUMMARY AND RESOURCES

This tutorial provided the steps to create a question bank and set up multiple-choice, cloze, and drag and drop questions. Take the time to experiment with other question types and build your own test banks.

To learn more about these topics, visit:

- Moodle.org
- https://docs.moodle.org/33/en/Question_bank
- https://docs.moodle.org/33/en/Embedded_Answers_(Cloze)_question_type
- https://docs.moodle.org/33/en/Quiz_activity
- https://docs.moodle.org/33/en/Multiple_Choice_question_type
- https://docs.moodle.org/33/en/All_or_nothing_multiple_choice_question_type
- https://docs.moodle.org/33/en/Drag_and_drop_matching_question_type
- https://docs.moodle.org/33/en/Matching_question_type

HOW TO USE THIS TUTORIAL:

This tutorial can be used as a self-paced lesson or as a lesson plan in a classroom setting.

- **As a self-paced lesson.**

  If this is a completely new skill for you, work through the tutorial from beginning to end. However, if you have some prior experience with the topic, use the menu hyperlinks on page one to jump to a topic that you want to learn.

  Most topics include hyperlinks to video demonstrations. While the videos are useful, you don't have to watch them. All the information you need is listed in the tutorial text and step instructions.

  Use the exercises at the end of the tutorial to practice the skill. This will help to correct any misunderstandings or mistakes before you use the skill in your classroom.

- **As a lesson-plan for a classroom.**

  When teaching this skill in a classroom, use the tutorial for:

  - ✓ **Motivation**—Use the tutorial introduction as a springboard for a deeper exploration of how instructors might use this functionality in their classrooms. Encourage discussion and contributions from your students.
  - ✓ **Demonstration**—Once your learners understand the purpose and pedagogical value of the functionality, demonstrate the steps of the relevant tasks as listed in the tutorial, using your computer and a projection system.
  - ✓ **Practice**—Use the tutorial exercises for student practice. Assist as necessary.
  - ✓ **Reference**—Encourage learners to use the tutorial post-session as a reference when using the functionality.

Return to the tutorial [main menu](#).

We would appreciate feedback on this tutorial! Please contact the General ctYOU.org Support staff listed under Division Contacts on ctYOU.org.