career tech

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
- Several types of cloze questions
- Drag and drop questions

If you have not used one of CareerTech's "How to Moodle" tutorials before, view the <u>instructions</u> 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 your work from this tutorial for future reference.

MENU OF TUTORIAL TOPICS

- Introduction to Moodle Quizzes and Question Banks
- Helpful Hints Before Getting Started
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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 numerous 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 a 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 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 complete some of the practice activities in this module. A zipped folder includes all of the files you need for this training. This file can be found on the ctYOU.org website by clicking "Moodle Training" in the top navigation bar of the website:

- 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, first 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 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! ⁽²⁾
- 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=iLPVsqJYjzk. The video at https://www.youtube.com/watch?v=iLPVsqJYjzk. The video at https://www.youtube.com/watch?v=GsDimeannOl 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.

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 training activities 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. 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 quiz, 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 in the Administration block, click Course administration > Question bank .	By default, there will be no categories listed on the dropdown menu on the Question Bank page. If questions have already been created, they will be listed in the dropdown.
	In the Boost theme, the question bank can be found by clicking the course editing gear icon in the upper right, then clicking More from the dropdown menu.	
 To create a category for your test bank, under Administration > Question Bank, click the Categories link. In the Boost theme, click the Categories link to the right of Question bank link. 	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,	
	In the Boost theme, click the Categories link to the right of Question bank link.	question type, and so forth. Tip: Categorize questions by unit or module topic.

Step	Action	Notes
4.	On the Edit Categories page 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 Quiz, and click the Add category button at the bottom of the screen.	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's meaningful to you.
6.	Add other categories as needed. When finished, in the Course Administration block click Question bank > Questions . In the Boost theme, click Question bank in the breadcrumb at the top of the page.	On the question bank page, 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.

Step	Action	Notes
1.	Turn editing on for the course. In the Boost theme, click the course editing gear icon and click Turn editing on.	Click the Turn editing on button or link in the upper right.
2.	Choose the topic where the quiz is to appear and click the Add an activity or resource link located under that topic.	
3.	On the menu that appears, click Quiz from the list of possible activities, and click the Add button at the bottom of the menu.	
4.	On the page that appears under the General section, type in a name for the quiz. You can type in a description in the Description box.	For example, type in the name Sample Quiz 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 each of 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 button and choose the option a new question from the dropdown menu.	

Step	Action	Notes
10.	On the page that appears, choose the question type, and then click the Add button at the bottom of the menu.	For training purposes, choose True/False .
11.	In the General section under Category , choose the category the question belongs under.	For training purposes, choose the Sample Quiz 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-1-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 box, choose "True."	
16.	Scroll to the bottom of the screen and click the Save changes button.	This will display the page that lists the questions in your quiz. 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 5-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 the sample quiz you created earlier.	
2.	Click the Edit quiz link under the Quiz Administration heading. In the Boost theme, click the course editing	This takes you to the Quiz Editing page.
	gear icon and click Edit quiz from the drop- down menu.	
3.	Click the Add button in the space where you would like to add the new multiple- choice question, and click to add a new question.	
4.	Click to create 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.	Choose the Sample Quiz category.
6.	Type in a unique descriptive question name, such as Sample-2-MC.	Remember, only those with rights to edit the course will see the question name—students will not see it.

Step	Action	Notes
7.	You can add an image to the question, if	For this exercise, adding an image is optional.
	you'd like. In the Question text editing box, click the Insert/Edit Image icon, which depicts some mountains and a sun). On the pop-up screen, click the Find or Upload an Image link. Click to browse button in the Attachment field to locate the barn.jpg file included with these training instructions. Then click to upload the image. If you wish to rename the file, you may do so. Avoid	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 outline drawing.jpg."
	using spaces in the file name. Instead, consider using dashes or underscores. Type in an accurate but succinct image	Accurate and concise image descriptions are very important for web-based images, and they are required by law for accessibility reasons.
description , and click to insert and save the image. Hit the Enter key after the image to move the cursor to the line underneath the image.	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.	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	By default, the answer choices will shuffle.
	within the question. The Shuffle the Choices box should have a checkmark by it.	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.

Step	Action	Notes
13.	Under Settings for 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.	

CREATING A QUIZ FROM THE COURSE PAGE

To set up any activity in Moodle, you must first:

- 1. Go to your course page.
- 2. Turn editing on.
- 3. Choose the topic or week where you will add the activity.
- 4. Click "Add an activity or resource" under that topic or week. This displays the list of available activities.

Now follow these steps to create the Assignment activity in your course:

Step	Action	Notes
1.	Section: General Field: Display Description on course page	If you check the box, the course page will display the description below the quiz name.
	Click to have description display on course page.	If you do not check this box, only the quiz name will appear on the course page. The quiz description will display when the student clicks to open the quiz.

Step	Action	Notes
2.	Section: Timing Fields: Open/close the quiz	When setting the timing on a quiz to open and close for a certain class period, in addition to
	Set an open (start) and close (finish) time, if you so choose (this is not required).	close, also enable and set a time limit (for example, 50 minutes).
	Be aware the quiz feature on your Moodle server may use military time (a 24-hour clock).	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. For convenience, a clock block appears on Oklahoma CareerTech's LMS, which may be hidden by the instructor.
3.	Section: Grade Field: Grade category	This determines the gradebook category where the score will appear.
	from the dropdown list.	
4.	Section: Grade Field: Grade to pass	This sets the minimum passing grade and affects activity and course completion.
	Choose the desired minimum grade.	
5.	Section: Grade Field: Attempts allowed	For a practice quiz, select Unlimited to allow students to take the quiz many times. For a test
	Use the drop-down to determine the number of attempts that are allowed.	that will count as a grade, set the Attempts Allowed to 1 (or the number of attempts you choose to allow).
6.	Section: Grade Field: Grading method	Under Grading Method, if students will be allowed to go through the quiz many times, you
	This option is only available if multiple attempts are allowed.	may want to select Highest Grade or Average Grade.
7.	Section: Layout Field: New 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
	number of questions allowed on each page.	navigation menu on the course screen allows students to view any question on the quiz.

Step	Action	Notes
8.	Section: Question Behavior Field: Shuffle Within Questions	If you have questions that include "all of the above" or "none of the above"
	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.	
9.	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.
10.	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 receive below a certain percentage, you may type in the critical percentage and the message they will see. Multiple percentage levels can be set.
11.	Section: Common Module Settings Field: Visible Choose to Show or Hide the quiz on the course page.	Use the Hide setting to prevent the activity from appearing on the course page. You may change the setting at any time.
12.	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.
13.	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 they 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 maybe used by a person who teaches more than one section of the same course during the same semester.

Step	Action	Notes
14.	Section: Common Module Settings Field: Grouping	This field only becomes active if you have enabled the Group Mode setting and students
	A Grouping is a set of Groups.	have been assigned to Groups.
15.	Section: Restrict Access > Access Restrictions > Add Restriction Fields: Activity completion	This set of fields allows students to view and access the Quiz only during the specified timeframe.
	If desired, select an activity from the dropdown list and the condition that must be met to allow access to the Quiz.	For training purposes, leave this option at the default.
16.	Section: Restrict Access > Access Restrictions > Add Restriction Fields: Date	This set of fields allows students to view and access the Quiz only during the specified timeframe.
	You must also add the date and time for the restriction.	For training purposes, leave this option at the default.
17.	Section: Restrict Access > Access Restrictions > Add Restriction Fields: Grade	These fields allow you to specify any grade conditions from other parts of the course that must be met prior to accessing the Quiz.
	If desired, select an activity from the dropdown list and an acceptable grade range that must be met to allow access to the Quiz.	You may set multiple grade conditions. If you do, access to the Quiz will only be allowed when ALL grade conditions that you specify here are met.
18.	Section: Restrict Access > Access Restrictions > Add Restriction Fields: User profile	You can restrict access based on any field from a user's profile.
	Select a field and a logical condition that must be met for the user to access the Quiz.	
19.	Section: Restrict Access > Access Restrictions > Add Restriction Field: Restriction set	This setting is recommended only for experienced Moodle users.
	This allows instructors to set restrictions within restrictions.	

Step	Action	Notes
20. Section: Activity Co Field: Completion	Section: Activity Completion Field: Completion tracking	The user will see a checkmark next to the activity name on the course page when the activity is complete, if tracked.
	status from the dropdown list.	Activity completion can be tracked manually by the student, automatically based on certain conditions, or not at all.
		Multiple conditions may be set if desired. If so, the activity will only be considered complete when ALL conditions are met.
		For training purposes, do not indicate activity completion.
21.	 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."
a		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.
22.	Section: Activity Completion Field: Expect completed on If you check the "enable" box for this field,	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
	you must also enter an appropriate date.	
23.	Click Save and Display at the bottom of the page.	The link has now been created from the course to the quiz.
24.	On the next screen, click the Edit Quiz button.	
25.	Click the small "Add" link to add a question to your quiz, and click the "a new question" link on the menu that appears.	A pop-up window will appear on which you will select "a new question," in this instance.

Step	Action	Notes
26.	Click the radio button next to multiple- choice question, and click the Add button.	The Multiple-Choice question type functions like a typical multiple-choice question. However this question type assigns partial credit in "multiple correct" questions if the student chooses some but not all correct responses.
		IMPORTANT: If you wish to require that students select all correct responses in a multiple-correct question, choose the All-or- Nothing question type.
27.	Under the General Settings, click the dropdown menu to ensure the Category for your course is selected for this example.	
28.	Type in a question name using the previously determined naming convention.	For training purposes, type: Sample-3-MC.
29.	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?
30.	Make the appropriate selection in the One or Multiple Answers dropdown menu.	Since this question will have two correct answers, select Multiple Answers Allowed in the dropdown menu.
31.	In the Choice 1 block, 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.
32.	In Choice 2 block, 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.
33.	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.
34.	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
35.	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 helps verify you filled in the answer correctly.
36.	If the first question you created does not appear in the Question Bank, move it there at this time. Click on the Edit Quiz link, on the Editing Quiz page, click the "Add" link, and then select "from question bank."	
37.	On the pop-up screen, click the checkbox next to the question(s) you would like to add, and then click the Add Selected Questions to the Quiz button.	You can also navigate to your course default questions. Click the checkbox next to the question you just created. In the dropdown menu, choose the quiz title and click the Move To button.

Remember, if you wish to require that students select all of the correct responses in a multiple-correct question, choose the All-or-Nothing question type. Please note that the All-or-Nothing question type is not part of the Moodle core, and you may need to request that your server administer install this plugin.

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 these three 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 in the Administration block, click Question Bank > Questions.	If using the Boost theme, click the course editing gear icon at the top of the course page and click More to go to Course Administration. From Course Administration, click Question Bank > Questions.
2.	On the Question Bank page, make sure the correct category appears in the dropdown menu, and then click Create a New Question.	For training purposes, select the Sample Quiz or a question bank of your choosing.
3.	From the pop-up window, click Embedded Answers (Cloze), and then click Add.	
4.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-3-C.
5.	The cloze question format requires a little bit of programming code. In the Question Text editing box, along with the question, add the following code: a. an open squiggly bracket { b. the number of points the question is worth c. a colon d. SA (or singleanswer spelled out with no spaces; this is the question type) e. a colon f. an equal sign g. the answer h. a closed squiggly bracket }	For this example, we'll 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.	

Step	Action	Notes
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.	

CREATING A NUMERICAL CLOZE QUESTION WITH SEVERAL ANSWER CHOICES

Step	Action	Notes
1.	From the question bank screen, click Create a New Question and Embedded Answers (Cloze), and then click Add.	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-4-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.	

Step	Action	Notes
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.	Check to make sure the question appears in the 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.

Step	Action	Notes
1.	On the question bank page, click the Create a New Question, button, click Embedded Answers (Cloze), and click Add.	
2.	Name the question according to your established naming convention.	For training purposes, type Sample-5-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.

Step	Action	Notes
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.

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 add a drag and drop question to a question bank.

Step	Action	Notes
1.	On the main course page, turn editing on.	

2. Click on the link to an existing quiz.

Step	Action	Notes
3.	Click Quiz Administration > Edit Quiz.	In the Boost theme, click the editing gear icon and click Edit Quiz.
4.	On the Editing Quiz screen, click the Add link, and then select to add 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-5-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.
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.	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 Settings for Multiple Tries, if setting up a practice quiz, set the penalty 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 view the question you just created.	

Step	Action	Notes
14.	Click the Fill in Correct Response button to ensure accuracy.	

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 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.	In the Administration block under Quiz Administration, click Edit Quiz.	In the Boost theme, click the editing gear icon and click Edit Quiz.
4.	Click to add a new question and select the Drag and Drop Into Text question type, and then click Add.	
5.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-6-DDT.

Step	Action	Notes
6.	In the Question Text editing box, type the cloze statement and designate the blank spaces with two square brackets. Example: [[]]	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.
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 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 button to add blanks for more choices as necessary and add the remaining answers.	For the training example, click the button to add blanks for three more choices. 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 or the Question Bank 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.	

CREATING A DRAG AND DROP MARKERS ACTIVITY

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

VIDEO DEMONSTRATION:

Watch this 9½-minute video to see a demonstration showing how to create a drag and drop markers 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 create a drag and drop marker activity:

Step	Action	Notes
1.	Click to add a new question to your existing question bank in the proper category.	
2.	Click the Drag and Drop Markers question type and click the Add button.	
3.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-7-DDM.
4.	In the question text, type instructions that explain what the students need to do to complete the activity.	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.)
5.	Type in the default points to reflect the number of answers in your activity.	For this example, set the Default Points to 4.
6.	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 darker green lines represent 100 pixels. You can see the image is approximately 270x380 pixels.	For the training assignment, upload the file drag- and-drop-letter.jpg, which was zipped with these instructions. Once uploaded, the image should appear.

Step	Action	Notes
7.	Under Markers, click to "shuffle drag items each time question is attempted." 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."
8.	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, select Rectangle. In the Coordinates box, type: 133,30;110,50 Select the Heading marker. 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: 130,210;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.
9.	Click the Save Changes button at the bottom of the page.	
10.	Preview the question.	
11.	Click the Fill in Correct Response button to ensure the questions and answers were typed correctly.	

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-8-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, colorgreen.png, and color-violet.

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 in the proper category.	
2.	Click the Drag and Drop Onto Image question type and click the Add button.	
3.	Type in a question name using your previously determined naming convention.	For training purposes, type: Sample-9-DDI.
4.	For the question text, 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 with this tutorial.

Step	Action	Notes
7.	Scroll down to the Draggable Items and select to choose a file for each item in the activity.	Under Draggable Item 1, click to select Draggable Image in the dropdown menu. Add the file color-red.png. For Draggable Items 2, 3, and 4 and add orange to Item 2, green to Item 3, and violet to Item 4.
8.	Click the Refresh Preview button toward the top of the screen.	
9.	Scroll back down to the Drop Zone area. 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.
10.	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.
11.	Notice that the pixel coordinates have been automatically calculated in the drop zones.	
12.	Click the Save Changes button at the bottom of the page.	
13.	Preview the question to ensure the images were plotted correctly by clicking the magnifying glass icon next to the question.	

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

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 send comments or suggestions to:

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