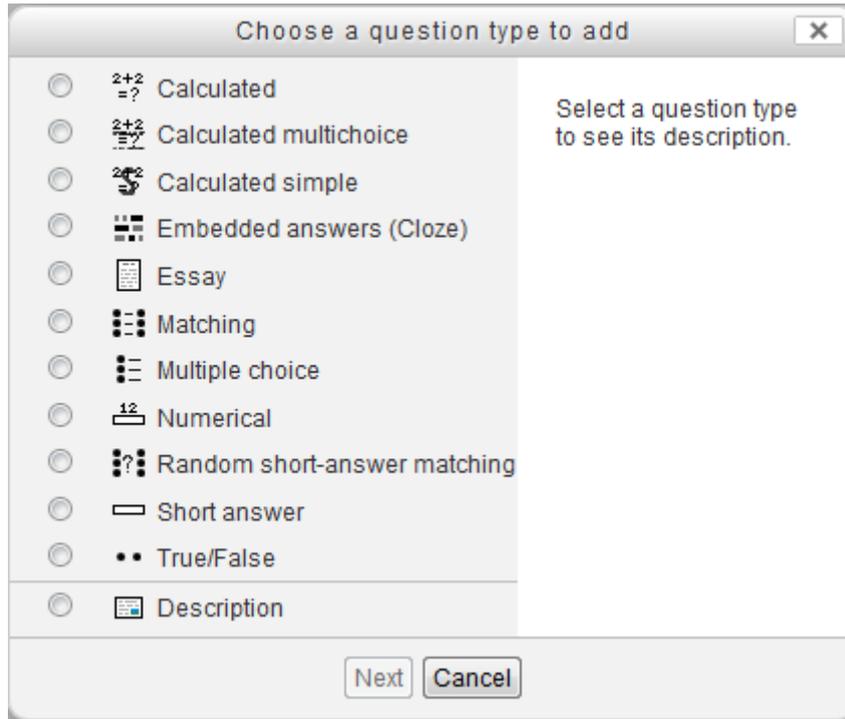


Online Exams Guide

Question types

The Figure below shows the different type of questions available in Moodle



The following table explains the available questions in Moodle

Details	Questions Type	No
<p>Calculated questions offer a way to create individual numerical questions by the use of wildcards (i.e. {x} and {y}) that are substituted with individual values when the quiz is taken. The main purpose of the calculated question is to create multiple versions of a question with different numerical value. For example</p> <p>Correct Answer Formula= {base}*{height}</p> <p>When a student takes the test, Moodle will randomly select values for {base} and {height} and grade the response using the result of the Correct Answer Formula.</p>	Calculated	1
<p>Calculated multi-choice questions are like multichoice questions with the additional property that the elements to select can include formula results from numeric values that are selected randomly from a set when the quiz is taken. The main difference is that the formula is included in the answer choice as {=...}</p>	Calculated Multi-choice	2

Simple calculated questions offer a way to create individual numerical questions whose response is the result of a numerical formula which contain variable numerical values by the use of wildcards (i.e {x} , {y}) that are substituted with random values when the quiz is taken.	Simple Calculated	٣
This question type is not actually a question. It just prints some text (and possibly graphics) without requiring an answer. This can be used to provide some information to be used by a subsequent group of questions.	Description	٤
This allows students to write at length on a particular subject and must be manually graded.	Essay	٥
A list of sub-questions is provided, along with a list of answers. The respondent must "match" the correct answers with each question.	Matching	٦
These are very flexible questions consist of a passage of text (in Moodle format) that has various answers embedded within it, including multiple choice, short answers and numerical answers.	Embedded Answers (Cloze)	٧
Multiple Choice questions create single-answer and multiple-answer questions, include pictures, sound or other media in the question and/or answer options (by inserting HTML) and weight individual answers.	Multiple Choice (Single-answer questions) (Multiple-answer questions)	٨
In response to a question (that may include an image), the respondent types a word or phrase. There may be several possible correct answers, with different grades. Answers may or may not be case sensitive. The answer could be a word or a phrase, but it must match one of your acceptable answers exactly.	Short-Answer	٩
A numerical question looks just like a short-answer question. The difference is that numerical answers are allowed to have an accepted error. This allows a continuous range of answers to be set. For example, if the answer is 30 with an accepted error of 5, then any number between 25 and 35 will be accepted as correct.	Numerical	١٠
In response to a question (that may include an image), the respondent selects from two options: True or False.	True/False	١١
Besides the standard question types that are part of the core Moodle distribution, there are a number of question type add-ons in the add-ons database.	Third-party question types	١٢

Creating a Quiz

Quizzes (exams) in Moodle contain two main components: the main body of the exam and the questions section. Working on the main body of the exam means putting the main regulations and interaction with the exam.

A) Creating the main body of the quiz:

1. Turn editing on by clicking the **Turn editing on** button at the top right hand side of the page.
2. Click the **Add an activity** and select **Quiz**.
3. **General:** Give the quiz a name and a description in the first and second fields respectively.
4. **Timing:** Use the "Open the quiz" and "Close the quiz" settings to control when to give students access to the quiz and when to close access to the quiz. Use the other "Timing" settings to control how long the students can take to complete a quiz and how many attempts are allowed.
5. **Grade:** Select which grade category the quiz grade will be placed in the grade book. Also select the number of attempts allowed for each student on the quiz and the method the quiz will be graded(i.e. Last attempt, average of attempts, etc.).
6. **Layout:** Use the "Layout" settings to choose how many questions to display per page and whether or not to rearrange questions or possible answers to questions.
7. **Question behaviors:** Select whether to shuffle each part of a question randomly when students take the test. Also select how questions behave. In "Adaptive mode" under "How questions behave" drop down menu, students can immediately submit an answer to an individual question, receive feedback, and attempt it again if they answered it incorrectly. Incorrect answers will receive a penalty determined by the "Penalty factor" that you specify in each question's settings.
8. **Review Options:** Use the "Review options" checkboxes to indicate what information should be revealed to students and when it should be revealed.
9. **Display:** You may select whether a student's picture is shown on the screen while attempting the quiz. You can also change the way the quiz is graded overall and by question by adjusting "Decimal places in grades."
10. **Extra restrictions on attempts:** An option to require a password to take the quiz. You may also restrict a quiz by an I.P. address. You may also enforce a period students must take before they can attempt the quiz again.
11. **Overall Feedback:** You can give overall feedback for the quiz using the "Overall feedback" fields and specifying a corresponding grade boundary(i.e. student receives the message "Good job" for grades between 100% and 95%). Make sure that one of the "Overall feedback" boxes in the "Review options" settings is checked if you want students to see overall feedback..
12. **Common Module Settings:** Here you may select the group mode for the quiz and if the quiz is visible to students right away. An ID number for the activity may also

be entered. This number will be used as a way to identify the quiz for grade calculating purposes.

13. Restrict Access: Access to the quiz can be restricted to only a certain time period here. Also a grade requirement from another activity may be set.

14. When finished, click the **Save and return to course** button to return to your course homepage or the **Save and display** button to enter the quiz and add questions to it.

B) Creating the questions for the quiz:

On the left side of the screen, you'll see a block where the questions you've added to the current quiz are displayed. Since this is a new quiz, there are no questions there, and Moodle tells us this.

On the right side of the screen, you'll see a category selection menu labeled "Category" and a button labeled "Edit categories." Categories are used to organize your quiz questions for your course, and they can be a container for sharing questions between courses. By default, there is one category, called Default. If you click on the category menu, you'll see it as an option.

Let's start out by making a category to hold our questions for the quiz:

1. From the Editing quiz page, click "Edit categories."
2. At the bottom of the list of current categories, you will see a blank line.
3. Type the name of your new question category in the first text box on the left.
4. Add a description for your class in the category info area.
5. If you'd like to share your question with the other classes on the server, select Yes in the Publish column.
6. Click the Save Changes button at the bottom,
7. If you want to add another category, a new blank line will appear at the bottom of the list.
8. When you are done adding categories, click the "Back to quiz editing" button. This will take you back to the "Editing quiz" page.

Once you've created your categories, it's time to add some questions:

1. From the "Editing Quiz" page, select a category to which you want to add a question.
2. The area below the category will display the question-creation block.
3. Select the question type you want to create from the "Create new question" option:

Multiple Choice

Both single- and multiple-answer multiple-choice questions are possible.

True/False

A simple multiple-choice question with only two possible answers.

Short Answer

Students answer this question by typing a word or phrase. You need to provide a list of acceptable answers.

Numerical

A short-answer question that accepts a numerical value instead of a word.

Matching

A standard two-column matching question.

Description

This embeds some text into the quiz. It's not a question but it's useful for giving mid-quiz instructions.

Random Question

Creating this question type allows you to add a question randomly drawn from the category to your quiz.

Random Short-Answer Matching

An interesting question type. The subquestions for the matching exercise are randomly drawn from short-answer questions in the category.

Embedded Answers (Cloze)

A question with multiple questions embedded within it. The development of this module is not yet finished, so I'm not going to cover this type in depth.

4. Fill in the form for the question type you are creating.
5. Click Save Changes at the bottom of the form.

Each question type has its own form and options. The details of the different types of questions and how to create them are below:

Multiple-choice questions

Moodle provides you with a lot of flexibility when creating this common question type. You can create single- and multiple-answer questions, display pictures in the question, and give relative grading weights to individual answers.

To create multiple-choice questions:

1. Start by giving the question a descriptive name. You'll use the name to track your questions later, so "Question 1" isn't a good name.
2. Create the question text. If you're using the HTML editor, you can format the question just like a word-processing document.
3. If you want to add an image to the question, you have two options: If you've already uploaded an image to your Files area, it will be available to add to the question stem in a dropdown menu under the Question text area. If you're using the HTML editor, you can click the image icon. This will pop-up the Insert Image window. You can choose to upload an image into your Files area from this window or add the URL of an image on the Web. If you add a file to your Files area, click the name of the file after you upload it to insert the link into the URL text entry at the top of the screen. Then click OK.
4. Choose whether students can select only one answer or multiple answers.
5. Write your first response in the Choice 1 text field.

6. Select a grade percentage for the answer. This is the percentage of the total points possible for the question selecting a given answer is worth. You can select negative percentages as well as positive percentages. So if a question is worth 10 points, selecting one correct response out of two in a multiple-choice question may give you 50% of the possible points (i.e., 5 points). Selecting a wrong answer may take away 10% (i.e., 2.5 points).
7. If you wish, you can add feedback for each response.
8. Fill in the response choices in the rest of the form. Any unused areas will be ignored.
9. Select the Save Changes button at the bottom of the screen.

Short-answer questions

Short-answer questions require the student to type an answer to a question. The answer could be a word or a phrase, but it must match one of your acceptable answers exactly. It's a good idea to keep the required answer as short as possible to avoid missing a correct answer that's phrased differently.

To create a short-answer question:

1. Give your question a descriptive name.
2. Create the question stem. If you want students to fill in a blank, use the underscore to indicate where the blank is.
3. Select an image to display if you want to add a picture to the question.
4. Choose whether capitalization is important; if case-sensitivity is important, whether you accept "majdi" as well as "Majdi" as an answer?
5. Fill in the answers you will accept. Give each answer a percentage of the grade if required. You could give common misspellings partial credit with this option.
6. Create feedback for each acceptable answer.
7. Click Save Changes to add the question to the category.

Numerical questions

Numerical questions are a lot like short-answer questions. You can create a question with an equation, and your students type in a numeric answer. Students will get credit for answers within the range of answers you specify.

To create a numerical question:

1. Select Numerical question from the new question menu.
2. Give the question a descriptive name.
3. Type the equation or numerical question for your students to solve.
4. Select an image to display if you want to add a picture to the question.
5. Enter the correct answer (you can add only one correct answer).
6. Enter the accepted error, i.e., the range above or below the correct answer. For example, if the correct answer is 5, but you will accept 4 or 6 as answers, your accepted error is 1.
7. Enter feedback for the question.
8. If you want to accept answers in multiple units (e.g., metric or English units), specify the unit multiplier and the unit label in the areas.
9. Click Save Changes to add the question to the category.

Matching questions

Matching questions ask students to match multiple question stems to multiple possible answers. They are useful for testing students' understanding of vocabulary and their ability to match examples to concepts. Setting up a matching question in Moodle is a bit different from setting up other types of questions.

To create a matching question:

1. Select a matching question from the new question menu.
2. Give the question a descriptive name.
3. Enter the question stem to tell the students what they are matching.
4. Select an image to display if you want to add a picture to the question.
5. For the first matching item, enter the question and a matching answer.
6. Fill in at least three questions and answers. You can enter as many as 10 items.
7. Click Save Changes to add the question to the category.

Moodle will display the question in two columns. The first will contain the questions. The second will display a dropdown menu for each question with all possible matching answers as options.

Random questions

A random question is a placeholder for a randomly selected question. One of the advantages of a computer-generated quiz is the ability to generate a quiz from questions randomly selected from a category. Each random question will pull a question randomly from the question category and insert it into the quiz whenever a student takes the quiz. Each random question can be inserted into a quiz only once, so you'll need to create a random question for each question you want randomly inserted into the quiz. Fortunately, it's easy to create a random question or even a bunch of them at once.

To create a random question:

1. Select "Random question" from the new question menu.
2. Give the question a descriptive name.
3. Click Save Changes to add the question to the category.

To create multiple random questions:

1. Click the Create multiple questions button below the new question menu.
2. Select the number of questions you want to create on the screen.
3. Enter a default point value for each created question.
4. Choose to add questions directly to the current quiz or leave them in the category for inclusion later.

Random short-answer matching questions

This is an interesting question type. You take random multiple short-answer questions and their correct answers and create a matching question out of them. It's an interesting way to reuse your short-answer questions in a new format.

To create a random short-answer matching question:

1. Select Random Short-Answer Matching from the new question menu.

2. Give the question a name.
3. Select the number of questions you want to add to the matching question.
4. Click Save Changes.

Calculated questions

A calculated question is a mathematical equation with placeholders for values that will be pulled randomly from a dataset when a student takes the quiz. For example, if I want to create a large number of multiplication problems to drill my students, I would create a question with two placeholders and a multiplication sign such as {a} * {b}. When a student takes the test, Moodle will randomly select values for a and b. The test will very rarely appear the same way twice.

To create a calculated question:

1. Select calculated question from the new question menu.
2. Give the question a name on the editing screen.
3. Enter your question into the question field. All variables you want Moodle to replace with generated values must be placed in curly braces.
4. Enter the formula for the answer. Be sure to use the same placeholders so Moodle can substitute the same values.
5. Determine the tolerance for error that you will accept in the answer. The tolerance and tolerance type combine to give a range of acceptable scores.
6. Select the number of significant figures you want in the correct answer.
7. If you want, type some feedback for the student.
8. Enter the units for the answer (e.g., meters, kg., ft., etc.). Moodle will look for the correct units. If you want to enter other acceptable units, such as metric versus English distances, enter them along with a conversion factor.
9. Click Save Changes.
10. On the next screen, choose whether to create substitution values for each placeholder only for this question, or for other questions in the same category.
11. Click Save Changes.
12. Create a dataset for the question or questions in the category. For each placeholder, generate a series of acceptable values. The more values you generate, the more a question can be used without repeating values.

Importing Questions

If you have questions from a textbook question bank, or if you don't want to use the web interface to create your questions, you can import them from a text file. Moodle supports eight native formats and provides an easy way to create new importers if you know a little PHP. Once you get to know a format, it may be easier simply to type the questions into a text file than to use the web interface. You can just keep typing instead of waiting for new web pages to load for each question.

The default formats include:

GIFT

With GIFT format, you can write multiple-choice, true/false, short-answer, matching, and numerical questions.

Aiken

Aiken format provides an easy way of writing multiple-choice questions for import. It's a very easy, readable format.

Missing-word

If you're going to write a lot of missing-word multiple-choice questions, the missing word format is an easy way to create them.

AON

This is the same as the missing-word format, except it creates matching questions from the multiple choice questions.

Blackboard

If you're converting from Blackboard to Moodle, you can export your course and import the question pools into Moodle using the Blackboard format.

WebCT

Currently, the WebCT format supports only the importing of multiple-choice and short-answer questions.

Course Test Manager

This format enables you to import questions from the Course Test Manager from Course Technology.

Embedded answers (Cloze)

The Cloze format is a multiple-answer question with embedded answers.

These questions can be a bit tricky to develop, but they are a unique way of asking questions.

Adding Questions to a Quiz

Once you've created your questions, you'll need to add them to the quiz. The buttons at the bottom of the question are used to add questions to the quiz. You can select individual questions using the checkboxes on the left of the question list. Select the individual questions and click the "Add selected to quiz" button at the bottom of the list. If you want to add all of the questions you created to the quiz, click the "Select all" button and then click the "Add selected to quiz" button. Once you've added a question to the quiz, it appears on the left side of the screen in the quiz question list. The question is still selectable on the right, but you can add it to the quiz only once. If you select the question in the category list again and add it to the quiz, nothing will happen. When you're done, click "Save this whole quiz." You'll then be taken back to your course's main page. If you click on the quiz link from the content block, you'll see the quiz intro page. You can preview the quiz by clicking on the "Attempt quiz now" button. If you answer the questions, you can submit the quiz and see the feedback and responses your students will see. Your students will see two scores at the top of the page. The first is the raw score representing the total points they scored out of the maximum possible points from each question. The second score is the weighted score representing the number of points out of the maximum possible points for the quiz. Your students will see two scores at the top of the page. The first is the raw score representing the total points they scored out of the maximum possible points from each question. The second score is the weighted score representing the number of points out of the maximum possible points for the quiz. If you've enabled feedback after answering, each question will be displayed below the scores with the answers marked correct or incorrect. If you've enabled the display of correct answers, they will appear highlighted in green. Your preview scores will be recorded with the students' attempts.