

QUESTION TYPES

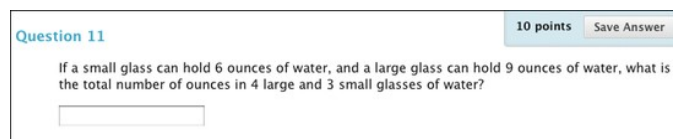
There are seventeen types of questions that can be added to tests and surveys.

- [Calculated Formula](#)
- [Calculated Numeric](#)
- [Either/Or](#)
- [Essay](#)
- [File Response](#) (Not available for surveys)
- [Fill in Multiple Blanks](#)
- [Fill in the Blank](#)
- [Hot Spot](#)
- [Jumbled Sentence](#)
- [Matching](#)
- [Multiple Answer](#)
- [Multiple Choice](#)
- [Opinion Scale/Likert](#)
- [Ordering](#)
- [Quiz Bowl](#)
- [Short Answer](#)
- [True/False](#)

CALCULATED FORMULA QUESTIONS

Calculated Formula questions present students with a question that requires them to make a calculation and respond with a numeric answer. The numbers in the question change with each user and are pulled from a range that you set. The correct answer is a specific value or a range of values. You may grant partial credit for answers falling within a range. Calculated Formula questions are graded automatically.

In this example, the numbers 6 and 9 are randomly generated from a range of values set by an instructor.



The screenshot shows a question box with the following content:

Question 11 10 points Save Answer

If a small glass can hold 6 ounces of water, and a large glass can hold 9 ounces of water, what is the total number of ounces in 4 large and 3 small glasses of water?

An instructor created this question by typing the following question text:

If a small glass can hold [x] ounces of water, and a large glass can hold [y] ounces of water, what is the total number of ounces in 4 large and 3 small glasses of water?

When a student views the question, the variables [x] and [y] are replaced with values that are generated randomly from number ranges that an instructor specifies.

BEFORE YOU BEGIN

The process for adding a calculated question to an assessment has three steps:

- Create the question and formula
- Define the values for the variables
- Confirm the variables and answers

This question type allows you to randomize the value of variables in an equation, making it useful when creating math drills or testing students seated closely together.

HOW TO CREATE THE QUESTION AND FORMULA

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Calculated Formula**.
4. In the **Question Text** box, type the information that will appear to students. The question text must contain at least one variable. Surround variables with square brackets. Variables are replaced by values when shown to students.

Variables can be letters, digits (0-9), periods (.), underscores (_) and hyphens (-). Variables cannot contain the letters "e," "i" and "pi" because they are reserved. Variable names must be unique, and you cannot reuse them. All other occurrences of the opening rectangular bracket ("[") should be preceded by the backslash ("\").

5. Type the **Answer Formula**. The formula is the mathematical expression used to find the correct answer. Choose operators from the buttons across the top of the **Answer Formula** box. In our example, the formula is $4y+3x$.

The answer formula tool is written by WIRIS.

The **formula is not visible to students**—it is used by Blackboard Learn™ to determine the correct answer to the question.

6. In the **Options** area, leave the **Answer Range** at zero if the answer must be exact. If you will allow a range of answers, set the answer options to define the range of full-credit answers. You can also **Allow Partial Credit** for a range of answers, and select **Units Required**.
7. Click **Next** to proceed.

Create/Edit Calculated Formula Question

* Indicates a required field.

Cancel Next

1. Question

Question Title

* Question Text

If a small glass can hold [x] ounces of water, and a large glass can hold [y] ounces of water, what is the total number of ounces in 4 large and 3 small glasses of water?

Path: p Words: 34

* Answer Formula

General Functions

$4y + 3x$

HOW TO DEFINE THE VARIABLES

The next page in the process defines the variables in the formula.

1. In the **Define Variables** section, provide the **Minimum Value** and **Maximum Value**. When the question is presented to a student, Blackboard Learn replaces the variable with a value randomly selected from the range you defined. Optionally, select a decimal place using the **Decimal Places** drop-down list.

	Variable Name	Minimum Value	Maximum Value	Decimal Places
1.	x	5	8	0
2.	y	9	12	0

2. In the **Answer Set Options** section, select the **Decimal Places for Answer** from the drop-down list. Students must provide the correct answer to this decimal place.

Decimal Places for Answer: 0

Number of Answer Sets: 5

Correct Answer Format: Normal

3. Type the **Number of Answer Sets**. This determines the number of possible variations of the question that will be presented to students. You can also specify the number of decimal places and if the correct answer format is normal or exponential.
4. Click **Calculate** to populate the answer sets.

HOW TO CONFIRM THE VARIABLES AND ANSWERS

The last step in the process displays the answer sets in a table. Each answer set represents one of the possible variations of the question that can be presented to students.

1. If needed, edit answer sets and click **Calculate** to update the list. Click **Remove** to the right of an answer set to delete it.
2. Optionally, type feedback for correct and incorrect answers.
3. Optionally, add Question Metadata in the **Categories and Keywords** section.

NOTE: You must enable the options for feedback and metadata on the

Question Settings page for those options to appear in individual questions.

	x	y	Answer	
1.	6	9	54 ± 0	Remove
2.	6	11	62 ± 0	Remove
3.	6	10	58 ± 0	Remove
4.	5	11	59 ± 0	Remove
5.	7	11	65 ± 0	Remove

Calculate

- Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

ABOUT SETTING ANSWER OPTIONS

Options for partial credit and units appear after you select the check box for **Allow Partial Credit** or **Units Required**.

In the preceding example:

- An answer that is within plus or minus 4 is awarded 100% of the point total.
- An answer that is within the partial credit range of plus or minus 5 to 8 is awarded 50% of the point total.

2. Options

✱ Answer Range +/- Numeric

Allow Partial Credit

✱ Partial Credit Range +/- Numeric

✱ Partial Credit Points Percentage

Units Required

✱ Answer Units Units Case Sensitive

✱ Units Points Percentage

The available options are:

- Answer Range:** The range of answers that are awarded full credit. Select whether it is a Numeric range or a Percentage range. If the answer must be exact, type zero for the range.
- Allow Partial Credit:** Allow partial credit on a less accurate range of answers. Set the Partial Credit Points Percentage to be awarded if the student's answer is within the partial credit range.
- Units Required:** The unit of measurement must be provided in the student's answer. Type the Answer Units and Units Points Percentage to be awarded if the units are entered correctly.

EXAMPLES

The following two examples use variables in equations. You can see how the instructor crafted the question text and the resulting student view of the question.

Example 1

Question Text

What is the value of z?
 $z = 2a + b$
 where $a = [r]$ and $b = [s]$

Path: p

Answer Formula

General Functions

$2a + b$

Question 13

What is the value of z?
 $z = 2a + b$
 where $a = 74$ and $b = 44$

Example 2

Question Text

What is the value of x in this equation?
 $x = [y] + 3 * [z]$

Path: p

Answer Formula

General Functions

$y + 3z$

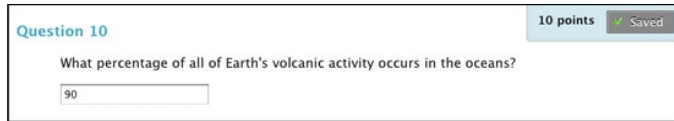
Question 12

What is the value of x in this equation?
 $x = 75 + 3 * 10$

CALCULATED NUMERIC QUESTIONS

With Calculated Numeric questions, students are presented with a question that requires a numeric answer. The question does not need to be a mathematical formula. You can provide a text question that requires a numeric answer. It resembles a Fill in the Blank question in which the correct answer is a number.

You can specify an exact numeric answer, or you can specify an answer and an allowable range. Calculated Numeric questions are graded automatically.



Question 10 10 points Saved

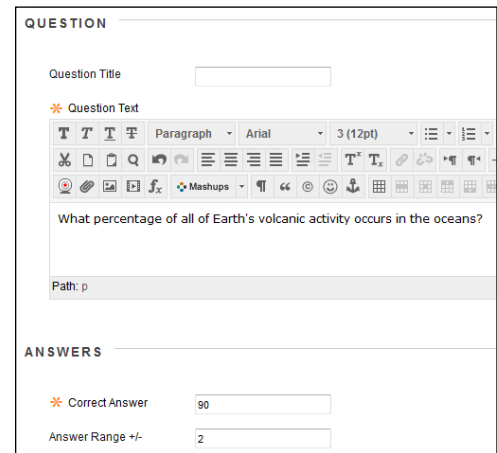
What percentage of all of Earth's volcanic activity occurs in the oceans?

90

NOTE: Calculated numeric answers must be numeric, not alphanumeric (for example, 42, not forty-two).

HOW TO CREATE A CALCULATED NUMERIC RESPONSE QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Calculated Numeric**.
4. Type the **Question Text**.
5. Type the **Correct Answer**. This value must be a number.
6. Type the **Answer Range**. If the answer must be exact for students to receive credit, enter 0. Any value that is less than or more than the **Correct Answer** by less than the **Answer Range** value will be marked as correct.
5. Type the **Correct Response Feedback** that appears in response to a correct answer and the **Incorrect Response Feedback** for an incorrect answer.
7. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



QUESTION

Question Title

Question Text

What percentage of all of Earth's volcanic activity occurs in the oceans?

Path: p

ANSWERS

Correct Answer 90

Answer Range +/- 2

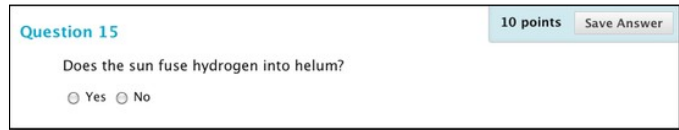
Example

If the average human body temperature under normal conditions ranges between 36.5 and 37.5 degrees Celsius, what is the average human body temperature in degrees Fahrenheit?

EITHER/OR QUESTIONS

In Either/Or questions, students are presented with a statement and asked to respond using a selection of predefined two-choice answers, such as:

- Yes/No
- Agree/Disagree
- Right/Wrong
- True/False



Question 15 10 points Save Answer

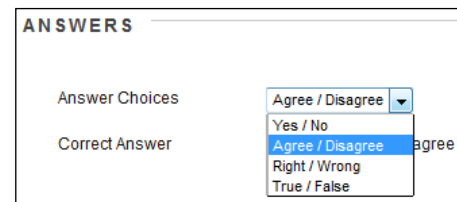
Does the sun fuse hydrogen into helium?

Yes No

This question type is useful in surveys to gauge users' opinions. It is a slight variation on the true/false question type, with more options for answer choices.

HOW TO CREATE AN EITHER/OR QUESTION

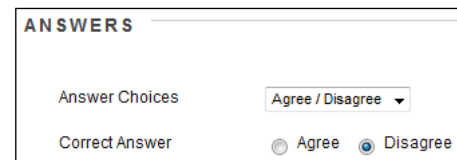
1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Either/Or**.
4. Type the **Question Text**.
5. Select a pair of **Answer Choices** from the drop-down list.
6. Select the **Correct Answer**.
8. Type the **Correct Response Feedback** that appears in response to a correct answer and the **Incorrect Response Feedback** for an incorrect answer.
9. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



ANSWERS

Answer Choices Agree / Disagree

Correct Answer agree



ANSWERS

Answer Choices Agree / Disagree

Correct Answer Agree Disagree

Example

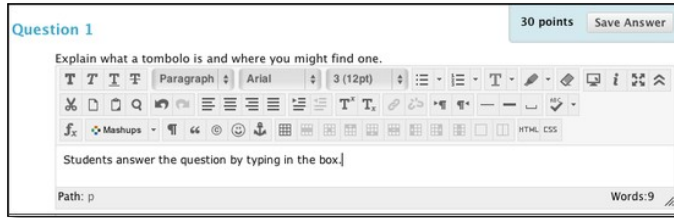
Hamlet's famous monologue, "To be or not to be...", is a meditation on suicide. Agree/Disagree

ESSAY QUESTIONS

Essay questions require students to type an answer in a text box. You can type directly in the text box or paste a question from another application, such as a simple text editor like Notepad or TextEdit.

Essay questions are graded manually.

NOTE: When creating Essay questions, you can use the math and equation editor.



HOW TO CREATE AN ESSAY QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Essay**.
4. On the **Create/Edit Essay Question** page, type the **Question Text**. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. Optionally, type a sample **Answer**.
6. Optionally, associate a rubric by clicking **Add Rubric**.
7. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

ALTERNATIVES TO ESSAY QUESTIONS

Other question types that allow student input include:

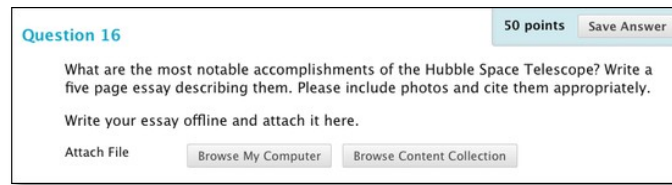
- File Response questions
- Fill in the Blank questions
- Fill in Multiple Blanks questions
- Short Answer questions allow you to limit the length of the response. Like Essay questions, Short Answer questions are manually graded.

FILE RESPONSE QUESTIONS

File Response questions require students to upload a file from their computers or from the Content Collection as the answer to the question. This type of question is graded manually, and it enables students to work on something before a test and submit it with a test, particularly if it requires a large amount of text.

Submitting the answer this way also allows you to download, review, and assess the submission without an active internet connection, although you will still need to access the Grade Center to assign a grade.

NOTE: You cannot add File Response questions to surveys.



The screenshot shows a question interface for 'Question 16' worth 50 points. The question text asks for notable accomplishments of the Hubble Space Telescope and requests a five-page essay with photos and citations. Below the text, there is an instruction to write the essay offline and attach it. At the bottom, there are three buttons: 'Attach File', 'Browse My Computer', and 'Browse Content Collection'.

ALTERNATIVES TO FILE RESPONSE QUESTIONS

You can also use Essay questions for questions that may require a shorter answer from a student, and Short Answer questions allow you to limit the size of the answer box for the response. Other question types that allow student input are:

- Fill in the Blank questions
- Fill in Multiple Blanks questions

HOW TO CREATE A FILE RESPONSE QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **File Response**.
4. Type the **Question Text**.
5. Type the **Correct Response Feedback** that appears in response to a correct answer and the **Incorrect Response Feedback** for an incorrect answer.
6. Optionally, associate a rubric by clicking **Add Rubric**.
7. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.


Example

Create a diagram of a simple relational database. Upload this file in JPG/JPEG format.

FILL IN MULTIPLE BLANKS QUESTIONS

In Fill in Multiple Blanks questions, students are presented with text containing up to 10 blanks. Each blank can have a maximum of 100 answers. Students complete the sentence by typing the appropriate word or phrase for each blank. For questions with a single blank, use Fill in the Blank Questions.

Fill in Multiple Blanks questions are graded automatically. Answers are scored based on whether the student answer matches the correct answers you provide. You can require student answers to match exactly, contain part of the correct answer, or match a pattern that you specify. You choose whether or not the answer is case sensitive.



Question 7 10 points Save Answer

The oceanic crust is made of [a] and [b] and is [c] [d] thick.

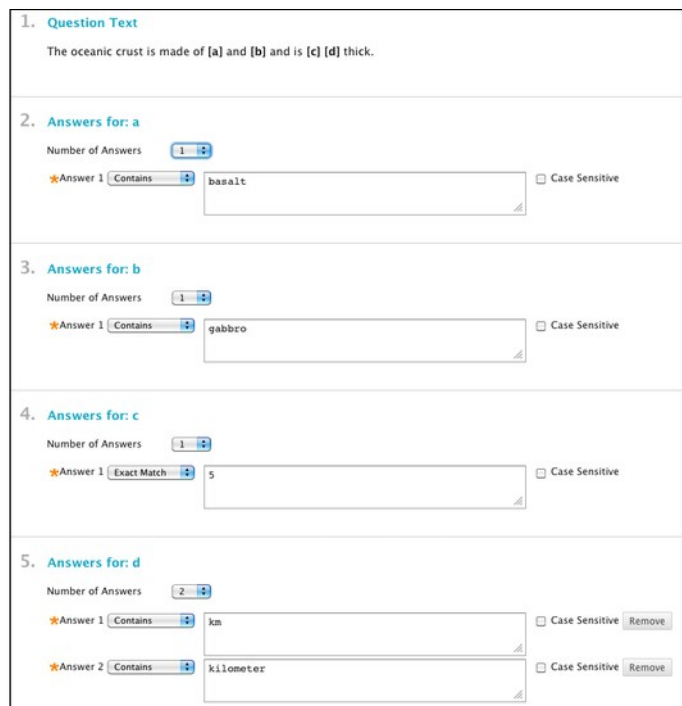
To create a Fill in the Multiple Blanks question, type the question text as the students see it, but replace the missing information with variables in square brackets. For example, "The oceanic crust is made of [a] and [b] and is [c] [d] thick." Variables can consist of letters, digits (0-9), periods (.), underscores (_) and hyphens (-). Variable names must be unique and cannot be reused.

NOTE: In restored courses, case sensitivity is turned off for all existing Fill in Multiple Blanks questions. Edit those questions and select **Case Sensitive**, if needed.

HOW TO CREATE A FILL IN MULTIPLE BLANKS QUESTION

Fill in Multiple Blanks questions have two parts: the question and the set of answers. Phrase the question so that it is apparent where the answer goes. Variables must be unique and placed within square brackets []. Separate sets of answers are defined for each variable. Bracketed variables appear as text boxes to students.

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Fill in Multiple Blanks**.
4. On the **Create/Edit Fill in Multiple Blanks Question** page, type the question, adding the variables in square brackets. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.



1. Question Text

The oceanic crust is made of [a] and [b] and is [c] [d] thick.

2. Answers for: a

Number of Answers 1

★ Answer 1 Contains basalt Case Sensitive

3. Answers for: b

Number of Answers 1

★ Answer 1 Contains gabbro Case Sensitive

4. Answers for: c

Number of Answers 1

★ Answer 1 Exact Match 5 Case Sensitive

5. Answers for: d

Number of Answers 2

★ Answer 1 Contains km Case Sensitive Remove

★ Answer 2 Contains kilometer Case Sensitive Remove

5. Select **Allow Partial Credit** if you want to allot each correct answer a fraction of the total point value.
6. Click **Next**.
7. On the next **Create/Edit** page, select the number of answers from the drop-down list for each variable. A single variable can have more than one possible answer.
8. Type answers in the **Answer** boxes.
9. Select **Exact Match**, **Contains**, or **Pattern Match** from each answer's drop down to specify how it will be evaluated against the student's answer.
10. Select the **Case Sensitive** check box if you want the answer to take capitalization into account.
11. Click **Next**.
12. Optionally, type **Feedback** for correct and incorrect responses, add **Categories and Keywords**, or type **Instructor Notes**.
13. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

Note how the answers are constructed for the example question. For variable C, the evaluation method is "Exact Match," since it is a number pulled directly from the textbook. Variable D has two answers, to allow both "km" and "kilometer." The evaluation method for both is "Contains" to allow for minor spelling variations, such as plural or not plural.

NOTE: You may need to double-check to make sure that no correct answers were incorrectly marked wrong due to misspellings or typos. For example, adding a double space between two words can be marked as incorrect.

PARTIAL CREDIT

Select **Allow Partial Credit** to award a percentage of the total points when students provide correct answers for some of the blanks. The amount of partial credit is assigned automatically, depending on the question's possible points and the number of answers. This option appears only if you have selected it in the question settings.

1. On the **Test Canvas**, create or edit a **Fill in Multiple Blanks** question.
2. In the **Options** section, select the **Allow Partial Credit** check box.

ANSWER SETS FOR EACH VARIABLE

Keep the answers simple and limited to as few words as possible. Limit answers to one word to avoid extra spaces between words or the order of the words causing a student answer to be scored as incorrect.

- Select **Contains** from the drop-down list in the answer to allow for abbreviations or partial answers. This option counts the student's answer as correct if it includes the word or words you specify. For example, set up a single answer that contains Franklin so that Benjamin Franklin,

Franklin, B Franklin, B. Franklin, and Ben Franklin are all counted as correct answers. This eliminates the need for you to list all acceptable possibilities for the answer Benjamin Franklin.

- Provide additional answers that allow for common spelling errors or select **Pattern Match** from the drop-down list in the answer to create a regular expression that allows for spelling variations.

PATTERN MATCH

Pattern Match is an advanced technique that enables you to use regular expressions when specifying correct answers to allow for some variability in the answers that will be counted as correct. They enable you to count certain patterns as correct, rather than an exact text match. For example, regular expressions enable grading of the wide range of possible answers that are typical of scientific data.

In a regular expression, most characters in the string match only themselves and are called literals. Some characters have special meaning and are called metacharacters. You can conduct an internet search on **regular expressions** for a complete list. Here are a few examples:

- A dot (.) matches any single character except newline characters.
- Brackets [] match anything inside the square brackets for one character.
- A dash (-) inside square brackets allows you to define a range. For example, [0123456789] could be rewritten as [0-9].
- A question mark (?) makes the preceding item in the regular expression optional. For example, Dec(ember)? will match Dec and December.

Simple string examples:

- b.t - matches with bat, bet, but, bit, b9t because any character can take the place of the dot (.).
- b[aeui]t matches bat, bet, but, bit.
- b[a-z]t would accept any three-letter combination that begins with b and ends with t. A number would not be accepted as the second character.
- [A-Z] matches any uppercase letter.
- [12] matches the target character to 1 or 2.
- [0-9] matches the target character to any number in the range 0 to 9.

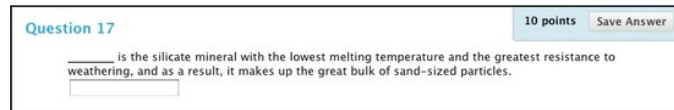
When you select **Pattern Match** for an answer, you can click **Check Pattern** to open a new window where you test your pattern to be sure it will produce the results you want. After testing and editing the pattern, click **Save & Exit** to save your modified pattern as the answer.

Type feedback for students when they give a correct or an incorrect answer. Feedback is optional. When partial credit is awarded, students receive the feedback message for correct answers.

FILL IN THE BLANK QUESTIONS

Fill in the Blank questions consist of a phrase, sentence, or paragraph with a blank space indicating where the student should provide the missing word or words. Use Fill in Multiple Blanks Questions to create a question with multiple answers.

Answers are scored based on whether the student answer matches the correct answers you provide. You can require student answers to match exactly, contain part of the correct answer, or match a pattern that you specify. You choose whether or not the answer is case sensitive. The maximum number of answers is 100.



The screenshot shows a question editor interface. At the top left, it says 'Question 17'. At the top right, it says '10 points' and 'Save Answer'. The main text of the question is: '_____ is the silicate mineral with the lowest melting temperature and the greatest resistance to weathering, and as a result, it makes up the great bulk of sand-sized particles.' Below the text is a text input field for the student's answer.

NOTE: In restored courses, case sensitivity is turned off for all existing Fill in the Blank questions. Edit those questions and select Case Sensitive, if needed.

HOW TO CREATE A FILL IN THE BLANK QUESTION

Fill in the Blank questions have two parts: the question and the set of answers. Phrase the question so that it is apparent where the answer goes in the context of the question, and so that there is only one answer. A text box appears following the question for students to type their answers.

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Fill in the Blank**.
4. Type the **Question Text**. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. To add more than one answer, select from the **Number of Answers** drop-down list. To delete an answer, click **Remove**.
6. Type each answer and select **Contains**, **Exact Match**, or **Pattern Match** to specify how the answer is evaluated against the student's answer. For **Contains** and **Exact Match**, select the check box if the answer is **Case Sensitive**.
7. Optionally, type **Feedback** for correct and incorrect responses, add **Categories** and **Keywords**, and type **Instructor Notes**.
8. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



The screenshot shows the 'ANSWERS' configuration panel. At the top, it says 'ANSWERS'. Below that, there is a 'Number of Answers' dropdown menu set to '2'. There are two answer entries, each with a star icon and a dropdown menu for the evaluation method. The first entry is 'Answer 1' with 'Exact Match' selected. The second entry is 'Answer 2' with 'Exact Match' selected. For each entry, there is a 'Case Sensitive' checkbox and a 'Remove' button.

ABOUT CREATING ANSWERS

Keep the answers simple and limited to as few words as possible. Limit answers to one word to avoid extra spaces between words or the order of the words causing a student answer to be scored as incorrect.

- Select **Contains** from the drop-down list in the answer to allow for abbreviations or partial answers. This option counts the student's answer as correct if it includes the word or words you specify. For example, set up a single answer that contains Franklin so that Benjamin Franklin, Franklin, B Franklin, B. Franklin, and Ben Franklin are all counted as correct answers. This eliminates the need for you to list all acceptable possibilities for the answer Benjamin Franklin.
- **Provide additional answers** that allow for common spelling errors or select **Pattern Match** from the drop-down list in the answer to create a regular expression that allows for spelling variations.

PATTERN MATCH

Pattern Match is an advanced technique that enables you to use regular expressions when specifying correct answers to allow for some variability in the answers that will be counted as correct. They enable you to count certain patterns as correct, rather than an exact text match. For example, regular expressions enable grading of the wide range of possible answers that are typical of scientific data.

In a regular expression, most characters in the string match only themselves and are called literals. Some characters have special meaning and are called metacharacters. You can conduct an internet search on **regular expressions** for a complete list. Here are a few examples:

- A dot (.) matches any single character except newline characters.
- Brackets [] match anything inside the square brackets for one character.
- A dash (-) inside square brackets allows you to define a range. For example, [0123456789] could be rewritten as [0-9].
- A question mark (?) makes the preceding item in the regular expression optional. For example, Dec(ember)? will match Dec and December.

Simple string examples:

- b.t - matches with bat, bet, but, bit, b9t because any character can take the place of the dot (.).
- b[aeui]t matches bat, bet, but, bit.
- b[a-z]t would accept any three-letter combination that begins with b and ends with t. A number would not be accepted as the second character.
- [A-Z] matches any uppercase letter.
- [12] matches the target character to 1 or 2.
- [0-9] matches the target character to any number in the range 0 to 9.



The screenshot shows a user interface for configuring an answer. On the left, there is a star icon followed by the text 'Answer 1'. To its right is a dropdown menu currently displaying 'Pattern Match'. Further right is a large, empty text input field. To the right of the input field are two buttons: 'Check Pattern' and 'Remove'.

When you select **Pattern Match** for an answer, you can click **Check Pattern** to open a new window where you test your pattern to be sure it will produce the results you want. After testing and editing the pattern, click **Save & Exit** to save your modified pattern as the answer.

Type feedback for students when they give a correct or an incorrect answer. Feedback is optional. When partial credit is awarded, students receive the feedback message for correct answers.

ENTER PATTERN

✘ Enter Answer Pattern

b[aeui]t

Success: The Answer Pattern matches the expected answer.

✘ Enter Expected Correct Answer

bat

Save & Exit
Exit
Check Pattern

Example

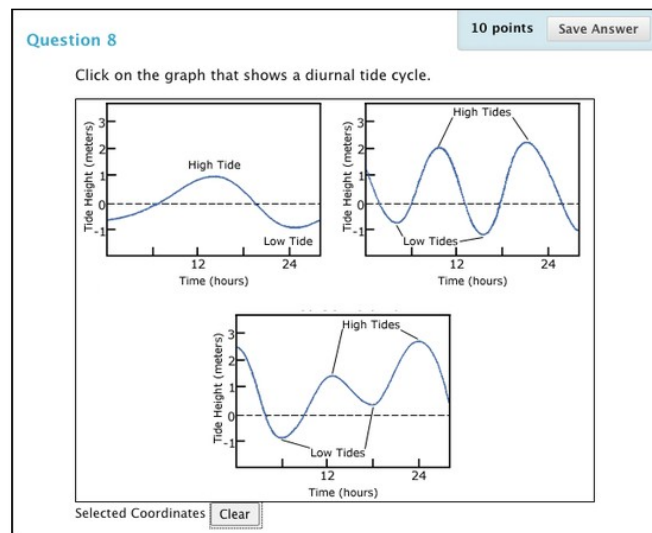
_____ is the silicate mineral with the lowest melting temperature and the greatest resistance to weathering, and as a result, it makes up the great bulk of sand-sized particles.

HOT SPOT QUESTIONS

With Hot Spot questions, students are presented with an image and are asked to select a particular area. Examples of Hot Spot questions include:

- Anatomy: Locate different parts of the body.
- Geography: Locate areas on a map.
- Foreign Language: Select different articles of clothing.

Hot Spot questions are graded automatically.

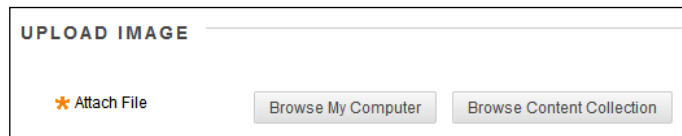


Have the image file ready before you create the question. You can upload the image file from your computer or link to it from Course Files or the Content Collection. Images must be GIF, JIF, JPG, JPEG, PNG, TIFF, and WMF files. Although there are no limitations, take into consideration the size of the image and make adjustments using an image editing application before uploading the file.

HOW TO CREATE A HOT SPOT QUESTION

1. Access a test, survey, or pool.
2. Point to **Create Question** to access the drop-down list.
3. Select **Hot Spot**.
4. On the **Create/Edit Hot Spot Question** page, type the question. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.

5. In the **Upload Image** section, locate the appropriate image file using one of the following options:



- To upload a file from your computer, click **Browse My Computer**.
- To upload a file from the course's storage repository, click **Browse Content Collection**.

6. Click **Next**.
7. On the next **Create/Edit** page, the image appears. Press and drag the mouse pointer to create a rectangle over the correct answer. When students select a point within the rectangle, they receive credit for a correct answer. The area of the hot spot is defined by pixels. If needed, click **Clear** to remove the rectangle and start again.

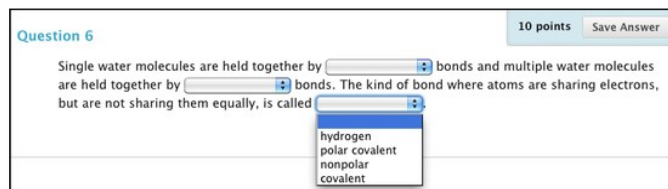
The screenshot shows the 'ANSWERS' section of a question editor. At the top, it says 'ANSWERS' in blue. Below that is 'Question 8' with a '10 points' indicator and a 'Save Answer' button. The question text is 'Click on the graph that shows a diurnal tide cycle.' There are three graphs showing tide height (meters) over time (hours). The first graph is highlighted with an orange rectangle, and a yellow callout box labeled 'Outline area' points to it. Below the graphs is a 'Selected Coordinates' field with a 'Clear' button. At the bottom, it shows 'Top Left Coordinates 57, 80' and 'Bottom Right Coordinates 267, 233'.

8. Optionally, provide **Feedback** or **Categories** and **Keywords**.
9. Click **Submit and Create Another** - OR- **Submit** to add the question to the test.

JUMBLLED SENTENCE QUESTIONS

Jumbled Sentence questions require students to complete a sentence by selecting words or phrases from a drop-down list. The same drop-down list appears for all blanks and can include both correct answers and distractors. Up to 100 different words or phrases can appear on the list.

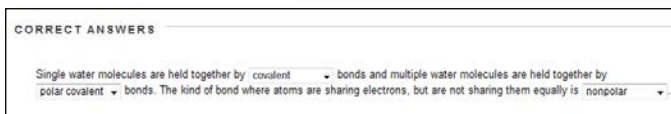
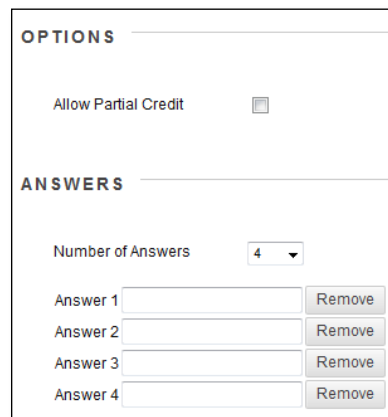
Jumbled Sentence questions are graded automatically.



Type the question text as students see it, but replace the missing information with variables in square brackets. For example, “Single water molecules are held together by [a] bonds and multiple water molecules are held together by [b] bonds. The kind of bond where atoms are sharing electrons, but are not sharing them equally is [c].” Variables can consist of letters, digits (0-9), periods (.), underscores (_) and hyphens (-). Variable names must be unique, and you cannot reuse them.

HOW TO CREATE A JUMBLLED SENTENCE QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Jumbled Sentence**.
4. On the **Create/Edit Jumbled Sentence Question** page, type the question, adding the variables in square brackets. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. Select **Allow Partial Credit** if you want to allot each correct answer a fraction of the total point value.
6. Select the **Number of Answers** from the drop-down list. Click **Remove** to delete extra answers.
7. Type answers in the **Answer** boxes. The list can include only correct answers or both correct answers and distractors. On the next page, you select the correct answer for each variable.
8. Click **Next**.
9. On the next **Create/Edit** page, use the drop-down list to select the correct answer for each variable.
10. Optionally, provide **Feedback** or **Categories** and **Keywords**.



11. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

HOW TO SPECIFY PARTIAL CREDIT

You can specify partial or negative credit for Jumbled Sentence questions. Partial credit gives a percentage of the question's possible points for a partially correct answer.

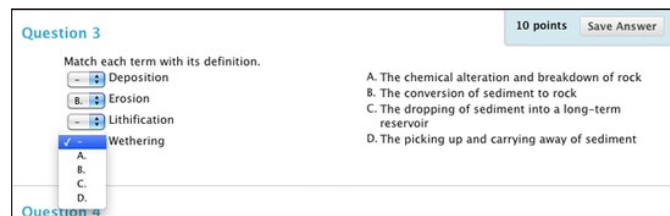
NOTE: You must enable the options to specify partial or negative credit on the Question Settings page to use them for individual questions.

Use the following steps to specify partial credit for Jumbled Sentence questions.

1. On the **Test Canvas**, create or edit a **Jumbled Sentence** question.
2. In the **Options** section, select the **Allow Partial Credit** check box. The amount of partial credit will be assigned automatically, depending on the question's possible points and the number of answers.
3. Click **Submit**.

MATCHING QUESTIONS

Matching questions allow students to pair items in one column to items in another column. You may include a different numbers of questions and answers in a matching question. For example, the question may include a list of animals and a list of food they eat (herbivore, carnivore, omnivore). Students would match each animal with their diet.



Students are granted partial credit for matching questions if they answer part of the question correctly. For example, if the question is worth eight points and a student gives the correct answers for half of the matches, they will receive four points.

HOW TO CREATE A MATCHING QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Matching**.

4. Type the **Question Text**. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. Select the **Options**, such as how answers are numbered or whether to allow partial credit.
6. Select the **Number of Questions** from the drop-down list. The default number of question items is 4 and the maximum is 100. If you want less than 4 question items, you can click **Remove** in a **Question/Pair Answer** box.
7. Type question-answer sets in the **Question/Answer Pair** text boxes.

OPTIONS

Allow Partial Credit

Answer Numbering Uppercase Letters (A, B, C) ▾

QUESTIONS

Number of Questions 4 ▾ Update Partial Credit %

Question/Answer Pair 1

Question

Remove

Paragraph Arial 3 (12pt)

Path: p Words: 0

Answer

Paragraph Arial 3 (12pt)

Path: p Words: 0

Partial Credit %

8. Optionally, you can select **Add unmatched answer choices** and specify a number to increase the question's difficulty.
9. For **Answer Order**, drag answers to the positions you want them to appear.

Add unmatched answer choices 2 ▾

Unmatched Answer Choice 1

Answer

Remove

Paragraph Arial 3 (12pt)

Path: p

Unmatched Answer Choice 2

Answer

Remove

Paragraph Arial 3 (12pt)

Path: p

ANSWER ORDER

Randomly
 Manually

Answer Choice

Answer Choice 1

Answer Choice 2

Answer Choice 3

Answer Choice 4

Unmatched Answer Choice 1

Unmatched Answer Choice 2

10. Optionally, type the **Correct Response Feedback** that appears in response to a correct answer and the **Incorrect Response Feedback** for an incorrect answer.
11. Optionally, add question metadata in the **Categories and Keywords** section.
12. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

HOW TO SPECIFY PARTIAL OR NEGATIVE CREDIT

You can specify partial or negative credit for Matching questions. Partial credit rewards students whose answer demonstrates incomplete mastery of the material. Use negative credit to discourage guessing.

NOTE: You must enable the options to specify partial or negative credit on the Question Settings page to use them for individual questions.

Use the following steps to specify partial or negative credit for Matching questions.

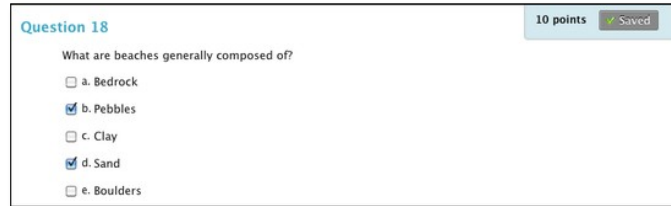
NOTE: The option to allow negative scores will not appear unless you selected the option to allow partial credit.

1. On the **Test Canvas**, create or edit a Matching question.
2. In the Options section, select the **Allow Partial Credit** check box.
3. Optionally, select the **Allow Negative Scores for Incorrect Answers** check box to assign penalties for incorrect answers
4. Optionally, select the **Allow Negative Overall Score for the Question** check box to allow a negative total for the question. Selecting this option means that a student could earn a score below zero for the question.
5. Partial credit is automatically distributed to equal 100%. To change the distribution, type a number in the **Partial Credit %** text box below each question/answer pair. This number is read as a percent. For example, typing 25 will give the student 25% of the question's possible points for selecting that match. Zero is an acceptable value, but the total partial credit percentages must add up to 100. Click **Update Partial Credit %** to redistribute the values evenly.

6. To assign negative credit to an answer, type a negative number in the **Negative Credit %** text box. For example, typing **-25** will subtract 25% of the question's possible points from a student's total grade for selecting that match. Zero is an acceptable value.
7. Click **Submit**.

MULTIPLE ANSWER QUESTIONS

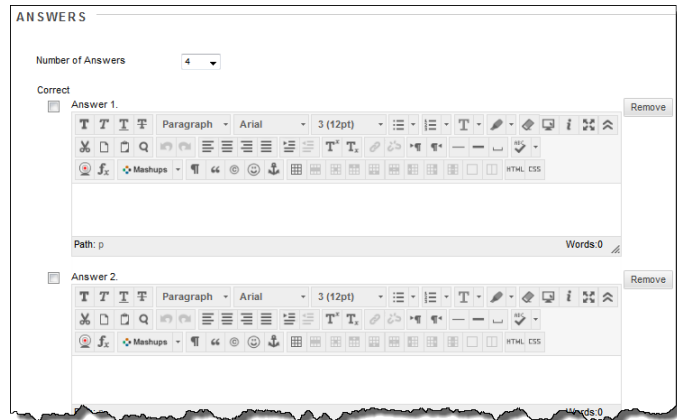
Multiple answer questions allow students to choose more than one answer. Use this type of question when more than one answer is correct. For example, in the medical field, this type of question could be used to select symptoms associated with a medical condition.



The screenshot shows a question titled "Question 18" worth 10 points. The question text is "What are beaches generally composed of?". There are five options: a. Bedrock, b. Pebbles, c. Clay, d. Sand, and e. Boulders. Options b and d are selected with blue checkmarks. A "Saved" button is visible in the top right corner.

HOW TO CREATE A MULTIPLE ANSWER QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Multiple Answer**.
4. Type the **Question Text**. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. The default number of answers is 4. If you want to increase this, select the **Number of Answers** from the drop-down list. To reduce the number of answers, click **Remove** next to the answer boxes to delete them. A multiple answer question cannot have fewer than 2 answers, or more than 100.
6. Complete the Answer box for each answer.
7. Select the correct answers by clicking the **Correct** check box for each answer.
8. Optionally, type feedback for correct and incorrect answers.
9. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



The screenshot shows the "ANSWERS" configuration panel. At the top, there is a "Number of Answers" dropdown menu set to 4. Below this, there are two answer boxes, "Answer 1" and "Answer 2". Each box has a "Correct" checkbox and a "Remove" button. The "Answer 1" box is currently selected and shows a rich text editor with a toolbar and a "Path: p" field. The "Answer 2" box is also visible below it.

Example

Which of the following are viable methods for traveling from London to Paris?

1. air
2. ferry
3. walk
4. rail

HOW TO SPECIFY PARTIAL OR NEGATIVE CREDIT

You can specify partial or negative credit for Multiple Answer questions. Partial credit rewards students whose answer demonstrates incomplete mastery of the material. Use negative credit to discourage guessing.

NOTE: You must enable the options to specify partial or negative credit on the Question Settings page to use them for individual questions.

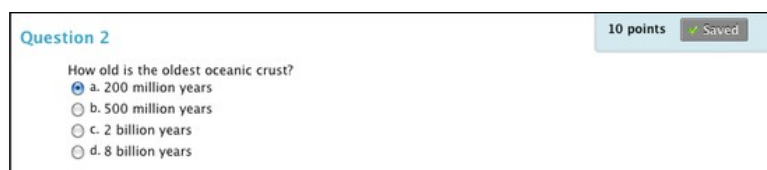
Use the following steps to specify partial or negative credit for Multiple Answer questions.

NOTE: The option to allow negative scores will not appear unless you selected the option to allow partial credit.

1. On the **Test Canvas**, create or edit a **Multiple Answer** question.
2. In the **Options** section, select the **Allow Partial Credit** check box.
3. Optionally, select the **Allow Negative Scores for Incorrect Answers** check box. This option appears after you select **Allow Partial Credit**.
4. In the **Partial Credit %** text box below each incorrect answer, type a value for partial credit. This number is read as a percent. For example, typing **50** will give the student 50% of the question's possible points for selecting that answer. Zero is an acceptable value.
5. To assign negative credit to an answer, type a negative number in the **Partial Credit %** text box. For example, typing **-50** will subtract 50% of the question's possible points from a student's total grade for selecting that answer. Zero is an acceptable value.
6. Click **Submit**.

MULTIPLE CHOICE QUESTIONS

Multiple choice questions allow students several choices with only one correct answer.



NOTE: Use Multiple Answer Questions to create multiple choice questions with more than one answer.

HOW TO CREATE A MULTIPLE CHOICE QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.

3. Select **Multiple Choice**.
4. On the **Create/Edit Multiple Choice Question** page, type the question. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. The default number of choices is 4. If you want to increase this, select the **Number of Answers** from the drop-list. To reduce the number of answers, **Remove** next to the answer boxes to delete them. A multiple choice question cannot have fewer than 2 answers or more than 100 answers.
6. Type an **Answer** in each box.
7. Select the **Correct** answer by clicking appropriate option. Only one correct answer is selected.
8. Optionally, type feedback for correct and incorrect answers. If you allowed partial credit, answers that are partially correct will receive the feedback for an incorrect answer.
9. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



you
down
click

the

HOW TO SPECIFY PARTIAL OR NEGATIVE CREDIT

You can specify partial or negative credit for Multiple Choice questions. Partial credit rewards students whose answer demonstrates incomplete mastery of the material. Use negative credit to discourage guessing.

NOTE: You must enable the options to specify partial or negative credit on the Question Settings page to use them for individual questions.

Use the following steps to specify partial or negative credit for Multiple Choice questions.

NOTE: The option to allow negative scores will not appear unless you selected the option to allow partial credit.

1. On the **Test Canvas**, create or edit a Multiple Choice question.
2. In the **Options** section, select the **Allow Partial Credit** check box.
3. Optionally, select the **Allow Negative Scores for Incorrect Answers** check box. This option appears after you select **Allow Partial Credit**.
4. In the **Partial Credit %** text box below each incorrect answer, type a value for partial credit. This number is read as a percent. For example, typing **50** will give the student 50% of the question's possible points for selecting that answer. Zero is an acceptable value.

- To assign negative credit to an answer, type a negative number in the **Partial Credit %** text box. For example, typing **-50** will subtract 50% of the question's possible points from a student's total grade for selecting that answer. Zero is an acceptable value.
- Click **Submit**.

OPINION SCALE AND LIKERT QUESTIONS

Opinion Scale/Likert questions are designed to measure students' attitudes or reactions using a comparable scale. By default, five answer choices appear, ranging from **Strongly Agree** to **Strongly Disagree**, and a sixth option that allows students to select **Not Applicable**. You can change the text of the answer choices and adjust the number of answers from 2 to 100.

Opinion Scale/Likert questions are graded automatically.

Question 1 Save Answer

How concerned are you about the polar ice caps melting?

1. Strongly Agree
 2. Agree
 3. Neither Agree nor Disagree
 4. Disagree
 5. Strongly Disagree
 6. Not Applicable

Opinion Scale/Likert questions are ideal for surveys. If you include the questions in a test, you must select a correct answer. If you require just an opinion, change the point value to zero so the question does not affect the test total.

HOW TO CREATE AN OPINION SCALE/LIKERT QUESTION

- Access a test, survey, or pool.
- On the action bar, point to **Create Question** to access the drop-down list.
- Select **Opinion Scale/Likert**.
- On the **Create/Edit Opinion Scale/Likert Question** page, type a question or statement. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
- Select **Answer Numbering** and **Answer Orientation** from the drop-down lists or leave the defaults.
- Select the **Number of Answers** from the drop-down list or leave the default of six. Click **Remove** to delete an answer box.
- To change the default answers, or to add answers if you have increased the number of possible answers, type an answer in each box.

OPTIONS

Answer Numbering: Arabic Numerals (1, 2, 3)

Answer Orientation: Horizontal

Allow Partial Credit:

Show Answers in Random Order:

ANSWERS

Number of Answers: 6

Correct

Answer 1: Strongly Agree

Answer 2: Agree

8. If you are creating this question in a test, select the correct answer.
9. Optionally, provide **Feedback** or **Categories and Keywords**.
10. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

HOW TO SPECIFY PARTIAL CREDIT

You can specify partial credit for Opinion Scale/Likert questions. Partial credit rewards students whose answers demonstrate incomplete mastery of the material.

NOTE: You must enable the options to specify partial credit on the Question Settings page to use them for individual questions.

Use the following steps to specify partial credit for Opinion Scale/Likert questions.

1. On the **Test Canvas** page, create or edit an Opinion Scale/Likert question.
2. In the **Options** section, select the **Allow Partial Credit** check box.
3. Type a number in the **Partial Credit %** text box below each question/answer pair. This number is read as a percent. For example, typing **25** will give the student 25% of the question's possible points for selecting that answer. Zero is an acceptable value.
4. Click **Submit**.

ORDERING QUESTIONS

Ordering questions require students to provide an answer by selecting the correct order of a series of items. For example, you can give students a list of historical events and ask them to place these events in chronological order.

Students are granted partial credit for ordering questions if they answer part of the question correctly. For example, if the question is worth eight points and the student gives the correct order for half of the items, they will receive four points.

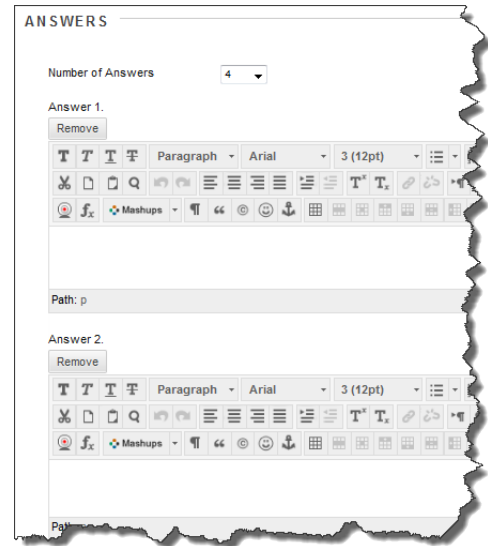


HOW TO CREATE AN ORDERING QUESTION

When you create an Ordering question, you add the answers in the correct order and later set the order that they display to students.

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Ordering**.

4. Type the **Question Text**. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. The default number of answers is 4. If you want to increase this, select the **Number of Answers** from the drop-down list. To reduce the number of answers, click **Remove** for one or more answer boxes to delete them. An ordering question cannot have fewer than 2 answers, or more than 100.
6. Type an **Answer** in each field.
7. Click **Next**.
8. Drag and drop the answers in the **Display Order** column to determine how they appear.



ANSWERS	
Correct Order	Display Order
Position: 1 Pacific	Correct Position: 1 Pacific
Position: 2 Indian	Correct Position: 2 Indian
Position: 3 Atlantic	Correct Position: 3 Atlantic
Position: 4 Arctic	Correct Position: 4 Arctic

9. Optionally, type feedback for correct and incorrect answers.
10. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

Example

Order the four oceans in size, with the largest first.

- Pacific
- Indian
- Atlantic
- Arctic

HOW TO SPECIFY PARTIAL CREDIT

You can specify partial credit for Ordering questions, giving a portion of the question's possible points to students whose order of answers is partially correct.

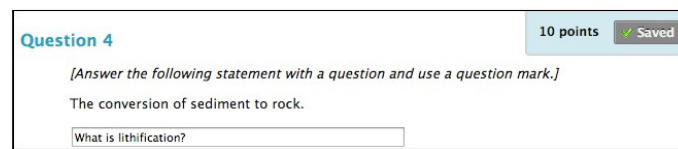
NOTE: You must enable the options to specify partial or negative credit on the Question Settings page to use them for individual questions.

Use the following steps to specify partial credit for Ordering questions.

1. On the **Test Canvas** page, create or edit an Ordering question.
2. In the **Options** section, select the **Allow Partial Credit** check box. The amount of partial credit is assigned automatically, depending on the question's possible points and the number of answers.
3. Click **Submit**.

QUIZ BOWL QUESTIONS

With Quiz Bowl questions, students are presented with an answer and they must provide the question. The student's response must be in the form of a question that begins with an interrogative, such as who, what, or where. For example, the statement, "It is the only country that is a continent," requires the answer, "What is Australia?"



Question 4 10 points Saved

[Answer the following statement with a question and use a question mark.]

The conversion of sediment to rock.

What is lithification?

Tip: Add instructions to the initial statement asking students to respond in the form of a question. Remind students to use a question mark. Incorrect end punctuation results in no credit for the response.

Quiz Bowl questions are graded automatically.

When you create a Quiz Bowl question, you provide:

- The statement to which students must answer with an appropriate question.
- All possible interrogatives the question could begin with—who, what, where, and so on.
- All possible correct answer phrases, including variations in spellings, plurals, and common abbreviations.

By default, when the system scores the question, a correct response contains any one of the interrogatives you added, immediately followed by any one of the phrases you added, including end punctuation.

To award students partial credit for responses including a correct phrase but missing the correct interrogative, enable the **Allow Partial Credit** option for answers in the test's **Question Settings**.

HOW TO CREATE A QUIZ BOWL QUESTION

1. Access a test, survey, or pool.

- On the action bar, point to **Create Question** to access the drop-down list.
- Select **Quiz Bowl**.
- On the **Create/Edit Quiz Bowl Question** page, type a statement that students can provide the question to. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
- Select the **Number of Interrogatives** from the drop-down list. You can add up to 103 interrogatives.
- If necessary, type or edit the interrogatives. Remove interrogatives using the **Remove** function to the right of each text box.
- Type the answer phrase. Optionally, select the number of answer phrases if more than one is needed. The maximum number of answer phrases is 100.

- Optionally, provide **Feedback** or **Categories and Keywords**.
- Click **Submit**.

HOW TO SPECIFY PARTIAL CREDIT

You can specify partial credit for Quiz Bowl questions. Partial credit rewards students whose answer demonstrates incomplete mastery of the material.

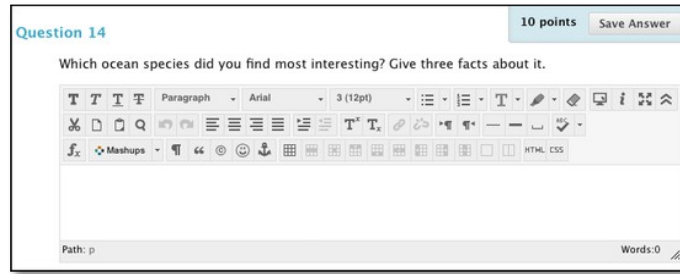
NOTE: You must enable the options to specify partial credit on the Question Settings page to use them for individual questions.

- On the **Test Canvas** page, create or edit a Quiz Bowl question.
- In the **Options** section, select the **Allow Partial Credit** check box.
- Type a number in the **Partial Credit %** text box below each question/answer pair. This number is read as a percent. For example, typing **25** will give the student 25% of the question's possible points for selecting that answer. Zero is an acceptable value.
- Click **Submit and Create Another** -OR- **Submit** to add the question to the test.

SHORT ANSWER QUESTIONS

Short Answer questions are similar to Essay questions. Student responses are not limited in length, but the number of rows you set for the text box size can let students know your expectations. The maximum number of rows is six.

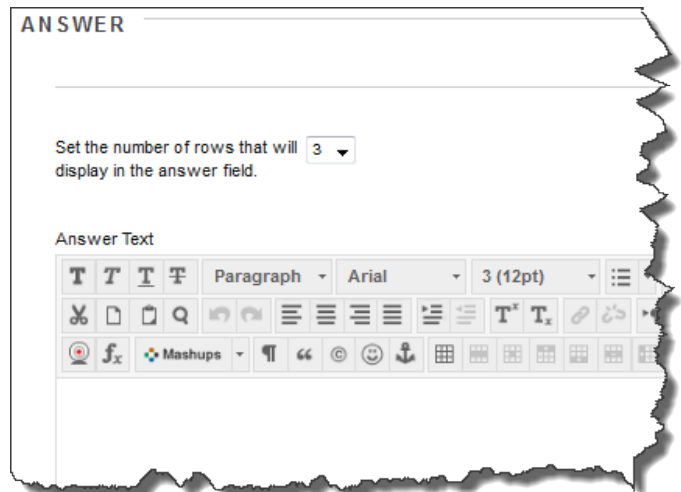
Both Essay questions and Short Answer questions are graded manually.



The screenshot shows a question editor for 'Question 14' with a '10 points' value and a 'Save Answer' button. The question text is 'Which ocean species did you find most interesting? Give three facts about it.' Below the text is a rich text editor toolbar with various icons for text formatting, alignment, and insertion. At the bottom, it shows 'Path: p' and 'Words: 0'.

HOW TO CREATE A SHORT ANSWER QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **Short Answer**.
4. Type the **Question Text**.
5. Determine the **Number of Rows to Display in the Answer Field** by selecting a number from the drop-down list. The number of rows is intended as a guideline for student response length. It does not impose an absolute limit on answer length.
6. Type an example of a correct answer in the **Answer Text** box.
7. Optionally, associate a rubric by clicking **Add Rubric**.
8. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



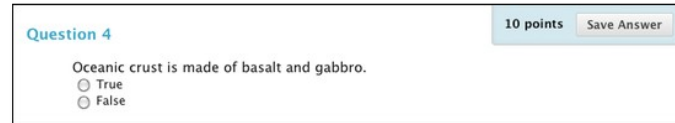
The screenshot shows the 'ANSWER' configuration interface. It includes a text input field for the question text, a dropdown menu to 'Set the number of rows that will display in the answer field' (currently set to 3), and an 'Answer Text' box with a rich text editor toolbar. The interface has a torn paper edge effect on the right side.

Example

Explain briefly what CCD (carbonate compensation depth) is, and how it governs the distribution of calcium carbonate on the sea floor.

TRUE OR FALSE QUESTIONS

True/False questions allow students to choose either true or false in response to a statement question. True and false answer options are limited to the words True and False.



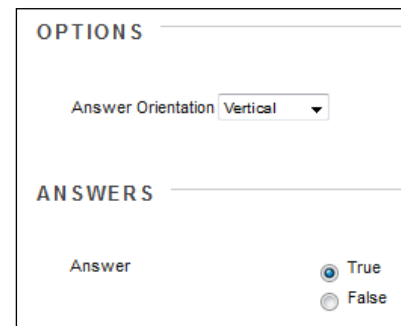
Question 4 10 points Save Answer

Oceanic crust is made of basalt and gabbro.

True
 False

HOW TO CREATE A TRUE/FALSE QUESTION

1. Access a test, survey, or pool.
2. On the action bar, point to **Create Question** to access the drop-down list.
3. Select **True/False**.
4. On the **Create/Edit True/False Question** page, type the question in the form of a statement that can be answered with true or false. Optionally, you can use the content editor to format the text and include files, images, web links, multimedia, and mashups.
5. Select the correct answer: **True** or **False**.
6. Optionally, type feedback for correct and incorrect answers.
7. Click **Submit and Create Another** -OR- **Submit** to add the question to the test.



OPTIONS

Answer Orientation Vertical ▾

ANSWERS

Answer True
 False