## Course Content - Tests - Test Question Types

## Calculated Formula Questions

Students are required to make a calculation and respond with a numeric answer. Instructors can give an allowable range if necessary.

- Variables are inserted where the numbers should appear, for example [x] and [y] or [a] and [b].
- The numbers change with each student and are pulled from a range that you set.
- The correct answer is either a specific value or within a range of values. You may grant partial credit for answers that fall within a range.


## Example:

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?

In the screenshot below, the number 6 was inserted for $[x]$ and the number 9 was inserted for [y].

## Question 11 <br> 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?
$\square$

## Calculated Numeric Questions

Students are presented with a question that requires a numeric answer. This type of question resembles Fill in the Blank questions where correct answers are numbers.

- The question doesn't need to be a mathematical formula. You can provide a text question that requires a numeric answer.
- You can specify an exact numeric answer, or you can specify an answer and an allowable range.
- Calculated numeric answers must be numeric (e.g. 42) not alphanumeric (e.g. forty-two).


## 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

Students are presented with a statement and asked to respond from two-choice answers:
You can select one of these pairs of answers:

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

Example:
Hamlet's famous monologue, "To be or not to be...," is a meditation on suicide.

## Agree/Disagree

## Essay and Short Answer Questions

Essay questions require students to type an answer in a text box, and you need to grade these questions manually. When creating a question be clear, direct, and concise so that the students understand precisely what is expected of them.

- Both Essay questions and Short Answer questions are graded manually.
- For Short Answer questions, student responses aren't limited in length, but the number of rows you set for the text box help students know your expectations. The maximum number of rows is six.


## Example:

Which ocean species did you find most interesting? Give three facts about it.


## File Response Questions

Students upload a file from their computers as the answer to the question. Students can create work before a test and submit the file with their submissions, particularly if it requires a large amount of text. You grade these questions manually.

- You can download the files and then review and assess the submissions later without an active internet connection.
- You will need to be online to access the Grade Center to assign grades.
- You can't add File Response questions to surveys.


## Example:

What are the most notable accomplishments of the Hubble Space Telescope? Write a five page essay describing it. Please include photos and cite them appropriately. Write your essay off-line and attach it here.

| Question 16 |  |
| :--- | :--- |
| What are the most notable accomplishments of the Hubble Space Telescope? Write a |  |
| five page essay describing them. Please include photos and cite them appropriately. |  |
| Write your essay offline and attach it here. |  |
| Attach File | Browse My Computer Browse Content Collection |

## Fill in Multiple Blanks Questions

Students are presented with text containing up to 10 blanks. Students type the appropriate word or phrase for each blank. When creating the sentence, there must be enough of the sentence included that the student can fill in the blanks, with clarity.

To create a Fill in the Multiple Blanks question, type the question text as students will see it, but replace the missing information with variables in square brackets.

- You can add a maximum of 100 answers for each blank.
- Variables can consist of letters, digits (0-9), periods (. ), underscores (_) and hyphens ( - ).
- Variable names must be unique and can't be reused.
- Answers are scored based on if 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.


## Example:

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

| Question 7 |  |  |
| :--- | :--- | :--- |
| The oceanic crust is made of $\square$ and $\square$ | 10 points | Save Answer |
| $\square$ | thick. |  |

## Fill In the Blank Questions

A Fill in the Blank question consists of a phrase, sentence, or paragraph with a single blank space indicating where a student should provide the missing word or words. Best practices include excluding a main point of the sentence which has been a main area of study and was key to a student's study or reading as required by the instructor.

Example:
$\qquad$ is the silicate mineral with the lowest melting temperature and the greatest resistance to weathering.

## Hot Spot Questions

Students are presented with an image and select a particular area as the answer. Instructors may get feedback from students regarding the hot spot area. Students may say that they selected the area and got the question wrong. Be sure to add in a slight buffer for selecting error (meaning that the mouse moved at the last second a half an centimeter). If there is a rigid hot spot without a buffer, the instructor may get a lot of feedback from students.

- Have the image file ready before you create the question. You can upload the image file from your computer or link to it from the Content Collection.
- Accepted images files include GIF, JIF, JPG, JPEG, PNG, TIFF, and WMF.
- Although no limitations exist, consider the size of the image and make adjustments with an image editing application before you upload the file.


## Example:

Select on the graph that shows a diurnal tide cycle.


## Jumbled Sentence Questions

Students are required to select words or phrases from a drop-down menu to complete a sentence.
Type the question text as students will see it, but replace the missing information with variables in square brackets.

- Variables can consist of letters, digits (0-9), periods ( . ), underscores ( _ ) and hyphens ( - ). Students do not see the variables, only the drop-down menu.
- Variable names must be unique, and you can't reuse them.
- The same menu appears for all blanks and can include both correct answers and distractors.
- You can add a maximum of 100 answers in the menu.


## 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].

| Question 6 |  | 10 points | Save Answer |
| :---: | :---: | :---: | :---: |
| Single water molecules are held together by $\square$ bonds and multiple water molecules are held together by $\square$ bonds. The kind of bond where atoms are sharing electrons, but are not sharing them equally, is called $\rightarrow$. |  |  |  |
| hydrogen polar covalent nonpolar covalent |  |  |  |

## Matching Questions

Students pair items in one column to items in another column. There can be an additional level of complexity to matching, where instructors could have one answer in a certain column be the answer for more than one item in the second column, but it is a fairly simple concept.

- You may include different numbers of questions and answers.
- Students are granted partial credit if they select some of the correct matching pairs.


## Example:

Match each item with its definition:
Deposition The dropping of sediment into a long-term reservoir
Erosion The picking up and carrying away of sediment
Lithification The conversion of sediment to rock.
Weathering The chemical alteration and breakdown of rock


## Multiple Answer Questions

Multiple Answer questions allow students to choose more than one answer. NOTE: If you are seeking to do an "all of the above" type question, this is not the right question format to use.

- You can allow partial and negative credit for Multiple Answer questions.
- Partial credit rewards students for whatever portion of the material they have mastered.
- Use negative credit to discourage guessing.


## Example:

Choose all of the examples or types of carbohydrates:
a. Galactose
b. Fructose
c. Sucrose
d. Maltose

| QUESTION 2 | 10 points | Save Answer |
| :--- | :--- | :--- |
| Choose all of the examples or types of carbohydrates. |  |  |
| A. Galactose |  |  |
| B. Fructose |  |  |
| C. Surcrose |  |  |
| D. Maltose |  |  |

## Multiple Choice Questions

Students select one correct answer from several choices.

- You can allow partial and negative credit for Multiple Choice questions.
- Partial credit rewards students for whatever portion of the material they have mastered.
- Use negative credit to discourage guessing.
- You can choose the partial credit percentage for each answer.


## Example:

Alfred Wegener discusses a supercontinent called $\qquad$ .
a. Linneus
b. Cosmas
c. Pangaea
d. Laurasia
e. Gondwana
QUESTION 2
Alfred Wegener discusses a supercontinent called___ Linneus
Cosmas
Pangaea
Laurasia
Gondwana

## Opinion Scale and Likert Questions

You can use Opinion Scale/Likert questions to measure students' attitudes or reactions with a comparable scale.

- By default, five answer choices appear that range from Strongly Agree to Strongly Disagree. A sixth option lets students select Not Applicable.
- You can change the text of the answer choices and adjust the number of answers from 2 to 100.
- 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 that the question doesn't affect the test total.


## Example:

How concerned are you about the polar ice caps melting?
Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree, Not Applicable.

| Question 1 |  |
| :--- | :--- |
| How concerned are you about the polar ice caps melting? | Save Answer |
| ○1.Strongly Agree ○2.Agree $\bigcirc$ 3. Neither Agree nor Disagree $\bigcirc$ 4. Disagree $O$ s.Strongly Disagree $O$ 6. Not Applicable |  |

## Ordering Questions

Students select the correct order of a series of items. It is good to note that lists that are too long can cause confusion, so breaking up a list into two questions would be better.

- By default, if you allowed partial credit, students are awarded partial credit if they answer part of the question correctly.


## Example:

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

1. Pacific
2. Atlantic
3. Indian

| Question 5 | 12 points | Save Answer |
| :---: | :---: | :---: |
| Order the four oceans in size, with the largest first. |  |  |
| Pacific |  |  |
| Indian |  |  |
| Atlantic |  |  |
| $\checkmark$ - |  |  |
| 2. |  |  |
| 3. |  |  |

## Quiz Bowl Questions

Students are presented with an answer and they provide the question. Student responses must be in the form of a question that begins with an interrogative, such as who, what, or where.

When you create a Quiz Bowl question, you provide the statement that students can provide the question for, all possible interrogatives the question could begin with (who, what, where, etc.), and all possible correct answer phrases, including variations in spellings, plurals, and common abbreviations.

- Add instructions to the initial statement that ask 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.
- A correct response contains one of the interrogatives you added, immediately followed by any one of the phrases you added, including end punctuation.


## Example:

It is the only country that is a continent.
What is Australia?
Question 4
[Answer the following statement with a question and use a question mark.]
The conversion of sediment to rock.
What is lithification?

## True or False Questions

Students choose true or false in response to a statement. These types of questions are often either too easy or two hard, it is difficult to get a true or false question that is the appropriate level of difficulty. The way to choose a true and false question is not to think of something that will stump the students, because that's not quite fair, but think of a statement that will cause the students to think and draw upon their previous study.

- True or False questions can also be created using the Either/Or question type, if you select True/False as the answer pair.
- Phrase the interrogative as a statement, not a question, in order to be grammatically correct.


## Example:

Multiculturalism is a state in which all sub-cultures in the same society are equal to one another.
True/False
QUESTION 6
10 points
Multiculturalism is a state in which all sub-cultures in the same society are equal
to one another.
True
False

