



## **QST User Manual**

qstonline.org

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### **Info.**

- After 4 unsuccessful logins, a user is locked out for 3 minutes.
- Mobile is only available to students.
- Phone browser is WCAG AA compatible.

### ***Suggestions to help in understanding and using QST:***

Organize your questions by folders:

- Grade
  - Subject
    - Topic
      - Unit
        - questions

or some similar file system structure that will make using your question bank easier for you.  
Your curriculum system design should underlie the structure of the question bank.

The SOURCE (folder) the question is in can be displayed for the students Submitted QST and also when you go to change the QST, View a QST, View/Mark a QST, or Export a QST as PDF.

Showing the SOURCE to the students helps them identify the Unit to find further information for the question.

In the GradeBook organize your quizzes by Topic and the questions come from the Units.

- if you click on the quiz number and then on Stats, you can see how the class did on each question in that QST.

- If you grouped your questions (example: first 5 questions are from Drift velocity Unit), then you easily see how the class performed on each question on that Unit as you can see how often the questions were gotten right, wrong, etc..
- Clicking on the number of incorrect answers for that question displays the names of the students that got it wrong. The questions with a high number of wrong answers suggest the class as a whole has a hard time with question. So this would be a Unit to focus your teaching on. Seeing the same students names coming up regularly by clicking on the number of wrong answers suggest who to focus your time on. Looking at their marks in the GradeBook would show if this was a one time issue or whether the student has been struggling all along.
- QST Details provides you with very detailed information on the results of a QST. This can be imported to Excel or some other stats package which will empower you to do further detailed analysis of questions, etc..

Explanations and SOURCE can be toggled to show or not.

In your Explanations you may want to add a 'reading' tag so the students know where to find further information. This would display to them after they submitted the QST and it was Posted with the permissions that it was viewable and Explanations was checked. They can make some notes on which readings to focus on.

It is advisable to not have text in your images that would lead a person to surmise what the answer may be or asks the actual question.

**QST** has seven different question types which combined with the Memory option provides 14 different types of question interactions. Memory allows for the secure one time display to individuals of material without the insecurity of using javascript nor H5P.

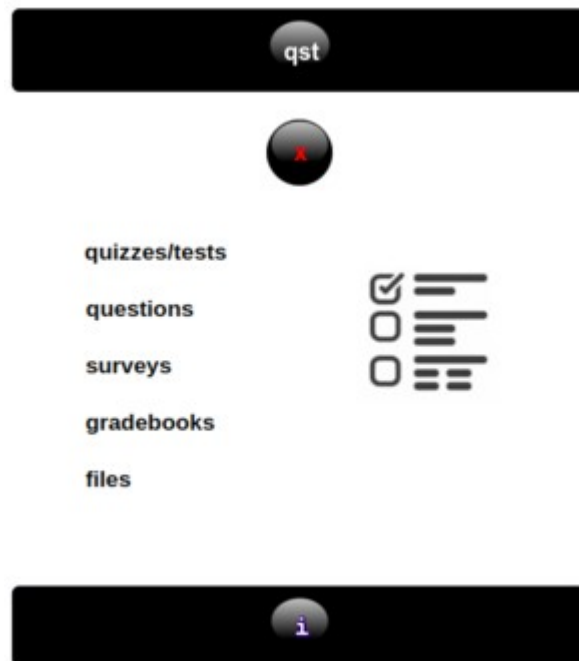
Beginning with version 3.12.01 of QST you will not be able to use the **Bypass** to copy pdf's and images into Equation Editor as we lock out right click on all pages to assist in the security of delivering your assessments. If you need to re-enable it, make a copy of QST.pm, open QST.pm and go to approx. line 72187 and replace: '`<HTML oncontextmenu=\"return false\"><HEAD>`' with '`<HTML><HEAD>`' save and restart apache.

## 1. Instructors

To the right is the home screen for Instructors.

Here you manage your questions, quizzes, surveys, tests, images and pdf's.

GradeBook provides the ability to view your users results, create a marking rubric and enter Assignment marks.




Your Administrator will be in control of creating your students and classes and assigning your students to the appropriate classes.

### a. Creating Questions

Click on Questions, then click on My Questions and either select *Create Folder* to place your questions in (recommended - so your questions are grouped and easier to find/use later) or select *Create Question*, which will cause a new window to open with the Question Builder screen available. You can flip between editors and the only contents saved is that in the editor showing when you save the question (also applies to the answer type).

We provide the ability to create the question and then choose which type of answer to accompany it, and can be altered later.


## The Advanced Editor


 **Create a Question**




Question Folder - General questions





Mark  Description

Advanced Equation Basic Explanation Memory

B I U 

X<sup>2</sup> X<sub>2</sub> Arial 16 


   

Multiple Choice Multiple Answer MatchXng T/F Y/N Short Answer Paragraph

Preview Save Save + Cancel

The Advanced Editor is a powerful WYSIWYG tool which allows the user to create a more diverse range of questions (edit source code also). Script and iframe tags are not allowed for users security.


## Create Explanation


 **Create a Question**




Question Folder - General questions



Mark  Description


Advanced Equation Basic Explanation Memory


B I U 




X<sup>2</sup> X<sub>2</sub> Arial 16 





  

B I U 

X<sup>2</sup> X<sub>2</sub> Arial 16 

|

## Create Memory

### Create a Question

### Question Folder - General questions

Mark

Description

**Advanced** *Equation* *Basic*

*Explanation*

**Memory**

The image shows a screenshot of a question editor interface. At the top, there are tabs for 'Advanced', 'Equation', 'Basic', 'Explanation', and 'Memory'. The 'Advanced' tab is selected. Below the tabs, there is a toolbar with various formatting options: bold (B), italic (I), underline (U), subscript (X<sub>2</sub>), superscript (X<sup>2</sup>), font face (Arial), font size (16), background color (yellow), text color (black), bulleted list, numbered list, indent, table, and image. Below the toolbar is a text input area. The 'Basic' tab is also visible below the 'Advanced' tab, showing a similar toolbar and text input area.

If you enter an **Explanation**, it will show when their QST is marked for them when you have **Submissions are viewable** checked and **Explanations** checked when you **Post** the QST.

A **Memory** is displayed to the student before the question is shown.

It is only displayed once and cannot be viewed again by the student when quiz questions are displayed singly.

It will show when their QST is marked for them when you have **Submissions are viewable** checked and **Memory** checked when you **Post** the QST.

The Equation Editor is for creating Math Equations. If you are familiar with MathML or LaTeX, just enter the code. Also supports mhchem for MathJax. Otherwise use **QST EQ**.

The Basic Editor is good for showing code samples, HTML, etc..

It is an editor that guarantees no malicious scripts, etc. can be embedded. Links to video and audio on other sites can be entered.

**Create an Advanced question with Multiple Answer type chosen.**

 Create a Question

### Question Folder - General questions

Mark

1

Description

Text here will display as question name under folders.

Advanced

Equation

Basic


Explanation

Memory

B

I

U



$X^2$


$X_2$


Arial ▾


16 ▾


A


▾

















Multiple Choice   Multiple Answer   MatchXng   T/F   Y/N   Short Answer   Paragraph

## Preview

Save

Save +

Cancel

Columns 1 ▾

Advanced

Equation

## Basic



○



+




## Using the Basic Editor

**Create a Question** **Question Folder - General questions**

Mark  Description

Advanced **Equation** Basic Explanation **Memory**

Enter your question here.  
And/or Insert Image or PDF or Video/Audio Link.  
Then select an answer type.

  
PDF

Video Link  Audio Link

Multiple Choice Multiple Answer MatchXng T/F Y/N Short Answer Paragraph

Preview Save Save + Cancel

The Basic Editor is excellent for displaying code samples and producing simple questions quickly. Using the Basic Editor ensures no iframes or malicious scripts can be embedded in the question or answers. Also, a pdf can be made available for your users to read.

**\*\*** If you are using DropBox links, change the ?dl=0 at the end to ?raw=1 for Video and Audio links.

## Using the Equation Editor

**Create a Question** **Question Folder - General questions**

Mark  Description

Advanced **Equation** Basic Explanation **Memory**

Use **QST EQ** or enter MathML tags or wrap TeX in  $...$  or  $...$  delimiters (or (...) and [...]), and AsciiMath in [...] delimiters. The text you enter is HTML, you can include tags, but then you have to be careful how you use <, &, and other HTML special characters - surrounding them by spaces should be sufficient.

When  $a \neq 0$ , there are two solutions to  $ax^2 + bx + c = 0$  and they are  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ .

Preview Equation

Multiple Choice Multiple Answer MatchXng T/F Y/N Short Answer Paragraph

Preview Save Save + Cancel

### Bypass - Inserting an image into Equation Editor using Show source:

Open the Advanced editor, add the image, click on the `</>` (Show source - on the far right) in the Advanced editor toolbar. copy the `` tag and then open the Equation editor and paste it in where you would like it.  
You can add some HTML to center it, etc..

Always Preview the question (not just the Preview Equation) to see how it will look for the users.

### Bypass - Inserting a PDF into Equation Editor using View page source:

Open the Basic Editor, click on PDF to the right of text box, select your PDF, Preview the question, right click next to View PDF and choose **View page source**, copy the `<table><td WIDTH="60"></td><td STYLE="cursor: pointer;" onclick="window.open('/schools/qst_files/939.pdf', 'pdf_windo', 'width=700,height=800')"><i>*View PDF</i></td></table><P>` bit and paste it into the Equation Editor. Always Preview the question (not just the Preview Equation) to see how it will look for the users.

The Equation editor will accept HTML tags.

### QST EQ

QST EQ is an advanced WYSIWYG editor used to create math and chemical equations and formulas. Logic, symbols, arrows, greek and function symbols are also available.

QST EQ

Select an item from left menu or input LaTeX, TeX, MathML, mhchem or AsciiMath.

Math	GK/Func
Logic	Arrow
Symbol	Format

×

÷

±

∓

·

\*

$\sqrt{ab}$

$\sqrt[n]{ab}$

$\log_a b$

$\lg ab$

$a^b$

$a_b$

$c_a^b$

$\widetilde{ab}$

$\widehat{ab}$

$\overleftarrow{ab}$

$\overrightarrow{ab}$

$\overbrace{ab}$

$\underbrace{ab}$

$\underline{ab}$

$\overline{ab}$

$\frac{ab}{cd}$

$\frac{\partial a}{\partial b}$

$\frac{dx}{dy}$

$\lim_{a \rightarrow b}$

$\int_a^b$

$\oint_a^b$

$\prod_a^b$

$\coprod_a^b$

$\bigcap_a^b$

$\bigcup_a^b$

$\bigvee_a^b$

$\bigwedge_a^b$

$\bigsqcup_a^b$

$\sum_a^b$

$\binom{a}{b}$

$\begin{bmatrix} a & b \\ c & d \end{bmatrix}$

$\begin{cases} a & x = 0 \\ b & x > 0 \end{cases}$

↶

↷

✂

📄

📁

🖨

A

✖

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

LaTeX/TeX Mode

Right click yellow highlight below for MathML

Save and Close

Cancel

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



**Export as MathML to place into web pages.**

The screenshot shows the 'QST EQ' interface. On the left is a sidebar with a 'Math' tab and various mathematical symbols. The main area has a toolbar with icons for undo, redo, cut, copy, paste, and a 'MathJax MathML Expression' dialog box. The dialog box contains the following MathML code:

```
<math xmlns="http://www.w3.org/1998/Math/MathML"
  <mfrac>
    <mrow>
      <mo>&#x2212;</mo>
      <mi>b</mi>
      <mo>&#xB1;</mo>
    </mrow>
    <msqrt>
      <msup>
        <mi>b</mi>
        <mn>2</mn>
      </msup>
      <mo>&#x2212;</mo>
      <mn>4</mn>
      <mi>a</mi>
      <mi>c</mi>
    </msqrt>
  </mfrac>
```

Below the code is a 'Copy to Clipboard' button.

Click **Advanced** or **Equation** or **Basic** to change editor.

Enter a Mark for the question.

The Mark may also signify the difficulty of the question.

A Description must be entered for each question as this is what is displayed when browsing for questions.

Default answer selections are available which will provide you with templates to begin with.

Enter up to 15 answers.

Multiple Choice and Multiple Answer answers have Advanced, Equation and Basic editors.

Paragraph answers have an Advanced and Basic editor.

Create your equation/formula with QST EQ, then paste into an answer selection

surrounded by \$\$.

**\*\* Always Preview** your question before saving it to see how it will appear to a student. This duplicates the display window in the QST.

Create more questions - It is much simpler to group and create your questions in advance of creating a QST. This is especially wise in the case of branching questions, where the complexity increases very quickly.


## b. Files - Images, PDF's


Upload your images and pdf's that you wish to use in your questions or answers by clicking on **files** in the left screen.

Max width for images in questions should be 450 pixels.



### Files

 Import Images QST Fri Jun 16 14:32:04 2023

 Images

 Import Images

- carrot.jpg

Rename

Description

Delete

View

Copy



Click on  to view folders and files under it.

Click on a folder name to view options.

Click on a file to view options.

- **caution** you may be deleting files used in quizzes, surveys or tests.

## Files

Import Images QST Fri Jun 16 14:32:04 2023

Images

Create Folder

Upload a File

Delete

Rename

Paste

Import Images

- carrot.jpg



Click on to view folders and files under it.

Click on a folder name to view options.

Click on a file to view options.

- **caution** you may be deleting files used in quizzes, surveys or tests.

QST — Mozilla Firefox

localhost/qst/one

File:  No file selected.  
5 MB max.  
Only .gif, .jpeg, .png and .pdf files

Description:  


To conform to WCAG 2.0 guidelines, all files must have a description for screen readers. 500 characters max.

Upload this file

Cancel

You must provide a Description for the file to meet WCAG standards.

\* If not using this just enter any text.

Your images will be available to add to your questions in the **Advanced** editor by clicking on the picture icon  in the toolbar.

Insert Image

QST Files

Image URL

Description for Image URL


To conform to WCAG 2.0 guidelines, all files must have a description for screen readers.  
500 characters max.

Insert Image

Click on QST Files to select a file you have uploaded.

If you enter an Image URL also enter a Description.

\* If not using this just enter any text.

In the **Basic** editor click on  or **PDF**.

View/Select File — Mozilla Firefox

localhost/qst/one

☒ View/Select Files

☐ My QST Files

- Import Images QST Mon Mar 28 18:12:16 2022
  - ☐ atom.gif



Click on  to view contents under it.

Click on the checkbox in front of image to automatically insert it.

## c. Inserting Videos

We do not let you upload videos due to the bandwidth they require for large scale use.

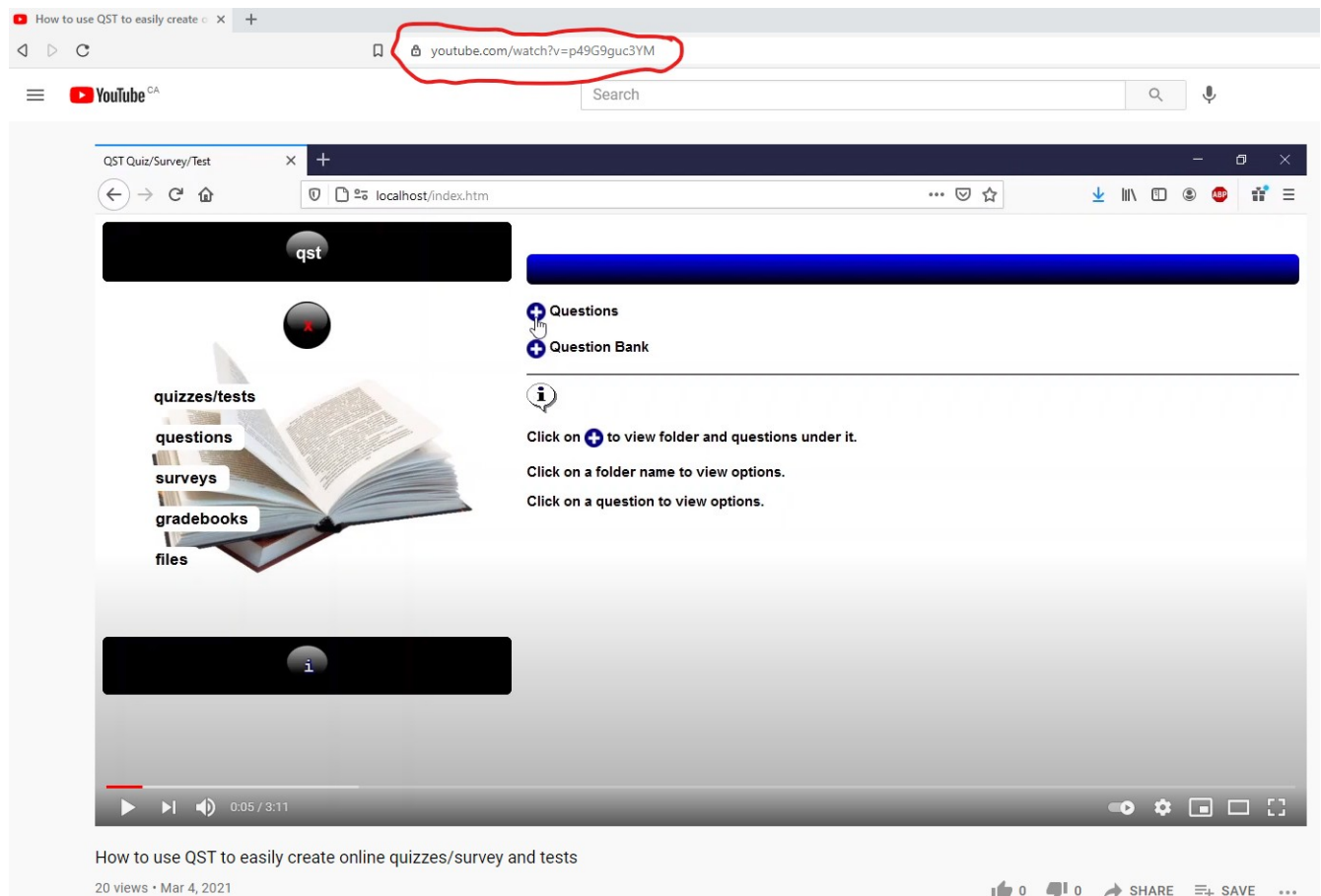
Our Rich Text Editor allows linking to videos on the following platforms: **YouTube, Vimeo, Vine, Instagram, DailyMotion or Youku.**

YouTube's licensing agreement (from our non-legal background) means that YouTube and anyone in the world can do anything with your uploaded videos. Some individuals/schools/institutions don't mind this, but others might not want their competitors using videos they created.

Vimeo. Is a pay-for solution, but you are not giving away videos. You can explore various purchase plans yourself on the Vimeo website. In Vimeo, set videos to "unlisted," meaning that folks searching Vimeo will not find them. You can also restrict embedding to specific domains, like your school or institution's domain.

Our Basic Editor allows linking to videos anywhere.

Go to the youtube video you want and copy the **url** in the toolbar:



How to use QST to easily create online quizzes/survey and tests

20 views · Mar 4, 2021

0 0 SHARE SAVE ...

Click on the video icon in the **Advanced** editor:

Create a Question Question Folder - Questions

Value  Description

**Advanced** Equation Basic

Multiple Choice Multiple Answer MatchXng T/F Y/N Short Answer Paragraph

Click on **Insert Video**.  
**Paste** the url in.

Insert Video

Video URL (YouTube, Vimeo, Vine, Instagram, DailyMotion or Youku)

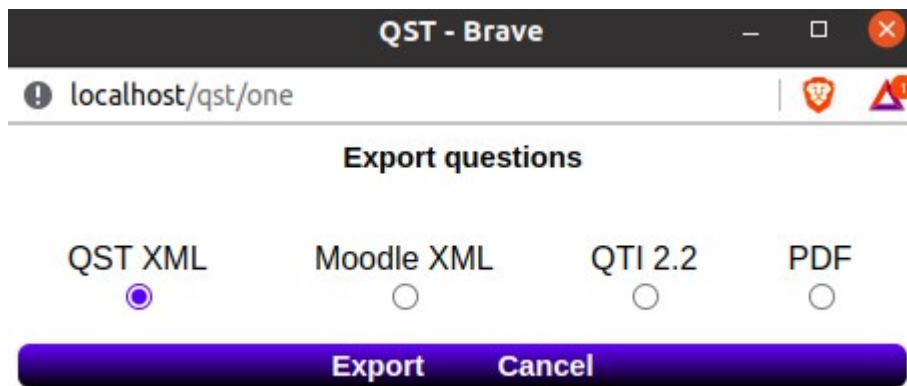
Insert Video

**Videos** should have **Closed Captioning** to be WCAG compatible.

#### d. Exporting/Importing questions

Exported questions will include the images and pdf's in the question or answers.  
The images are base 64 encoded (in QST XML and Moodle XML).  
Also the Explanations and file descriptions (for screenreaders) will be included.

Questions can be exported in QST XML, Moodle XML, QTI 2.2 zip format and PDF.

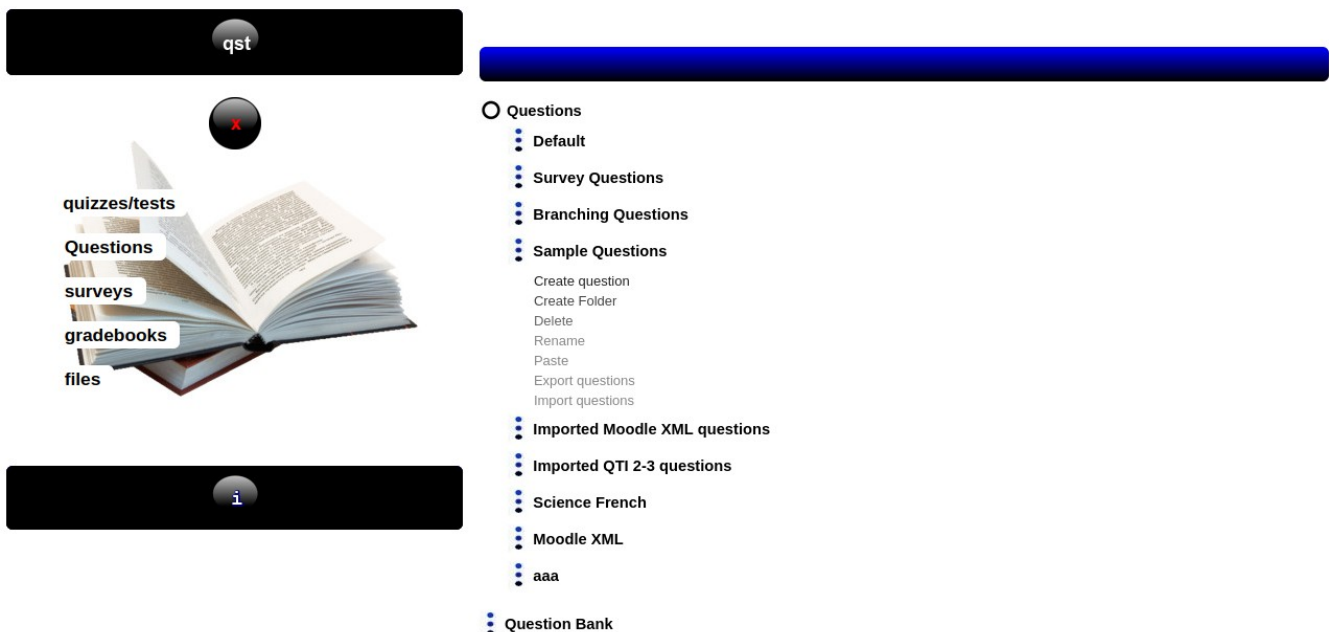


Under My Questions, click on a folder name to export all the questions in that folder.

This will only export all the questions in the folder, it will not recurse through folders under that folder.

Images in questions and answers will be included in the export file.

**TIP** - Create a New folder and copy/paste questions into it, then Export.



Click on a folder name to Import Questions to it.

Any images associated with the question or it's answers will be saved under My QST Files/Import Images QST Date and Time.

### Importing Word XML files:

Only multiple choice - single answer questions can be imported (there can be up to 15 answers).

\* Images (in questions and answers) will be imported also

A folder will be created under QST Files with the name Imported Images Word and the date and time

Open your word .doc and make sure you put QST as the first word at the beginning of each *question*.

There is no need to number the questions

Each *answer* should have )@ at the beginning of the line with each answer,

example )@ answer

Each *correct answer* should have \*\* as the first letters of the answer.

The character combinations )@ and \*\* and QST should not be used in any *questions or answers* as they are special character in the import format.

Once you have done the above, save your word doc as xml and import it.

If no correct answers are indicated, the first answer will be set as correct.

Check your questions after you have uploaded them for any issues.

### **An example**

QST What is the bird below?



)@ robin

)@



)@ pigeon

)@ \*\* pheasant

### **Importing/Exporting Moodle XML files:**

Only multiple choice, matching, true/false, short answer and essay questions may be imported.

Matching questions may only be text.

\* Images (in questions and answers) will be imported also

ALT text in images will be imported as File Descriptions in QST for WCAG AA compliance

A folder will be created under QST Files with the name Imported Images Moodle and the date and time

Check your questions after you have uploaded them for any issues.

### **Importing/Exporting QTI 2/3 format files:**

Only xml and zip files imported.

Only multiple choice, matching, true/false, short answer and essay questions may be imported.

Matching questions may only be text and contain 70 characters.

\* Images (in questions and answers) will be imported also



A folder will be created under QST Files with the name Imported Images QTI ZIP and the date and time  
Check your questions after you have uploaded them for any issues.

### **Importing/Exporting QST XML files:**

All question types are imported.

\* Images (in questions and answers), file descriptions and Explanations will be imported also

A folder will be created under QST Files with the name Imported Images QST XML and the date and time

Check your questions after you have uploaded them for any issues.

Share your questions with other QST users or your Question Bank Admin.

Twenty-five questions containing images in questions and answers will load in  
approx. 10 - 20 seconds. The file size will be approx. 800Kb.

Question Bundles are available to Import at [qstonline.org](http://qstonline.org) under Info.

### **Example of QST XML file:**

```
<?xml version="1.0" ?>
<item>
<type>MC</type>
<mode>1</mode>
<sub_type>1</sub_type>
<ans_mode>0</ans_mode>
<value>1</value>
<descrip>What is the bird</descrip>
<explanimage_name>pheasant_bird.jpg</explanimage_name>
<explanimage>Base 64 encoded image here - left out for this example
</explanimage>
<explanation><p>A pheasant has a colored band around it's neck</p></explanation>
<mem_image_name>mikki_2_2_3.jpg</mem_image_name>
<mem_image>Base 64 encoded image here - left out for this example
</mem_image>
<memory>Look at the image <p>then click
Continue.
</memory>
<qimage_name>pheasant.jpg</qimage_name>
<qimage> Base 64 encoded image here - left out for this example
</qimage>
<question><p><span style="font-size: 16px;">What is the bird shown
below?</span></p><p><span style="font-
size: 16px;"><br></span><br></p></question>
<vlink>0</vlink>
<alink>0</alink>
<kolum>1</kolum>
<answers>
<c_answer>0</c_answer>
<answer>robin</answer>
<q_order>1</q_order>
</answers>
<answers>
<c_answer>0</c_answer>
<answer>owl</answer>
<q_order>2</q_order>
</answers>
<answers>
<c_answer>0</c_answer>
```

```

<answer>magpie</answer>
<q_order>3</q_order>
</answers>
<answers>
<c_answer>1</c_answer>
<answer>pheasanr</answer>
<q_order>4</q_order>
</answers>
</item>
</xml>

```

### Explanation of xml:

- item consists of the question and answers
  - type is MC (multiple choice one answer), MA (multiple choice many answers), YN (yes/no), TF (true/false), SA (short answer), P (paragraph), MX (matching)
  - mode (what editor is used to create the question)
    - 0 Basic editor
    - 1 Advanced editor
    - 2 Equation editor
  - subtype (type of question)
    - 1 quizzes/tests
    - 2 surveys
  - ans\_mode (what editor is used to create the answers)
    - 0 Basic editor
    - 1 Advanced editor
    - 2 Equation editor
  - value (what the question is worth 1 - 99 marks)
  - descrip (description of the question - max 50 characters)
  - explanimage\_name (name of the image in the explanation - could be more than one of these)
  - explanimage (base 64 encoded image)
  - explanation (describe why the answer is correct)
  - mem\_image\_name (name of the image in the memory - could be more than one of these)
  - mem\_image (base 64 encoded image)
  - memory (what you wish to show them before the question is displayed)
  - qimage\_name (name of the image in the question - could be more than one of these)
  - qimage (base 64 encoded image)
  - if there are more than 1 images in the question, there will be multiple <qimage\_name><qimage> one after another
  - question (the actual question)
  - vlink (video link - only if you used the basic editor to create question)
  - alink (audio link - only if you used the basic editor to create question)
  - kolum (how many columns to display answers in 1-3)
  - answers (one for each answer)
    - c\_answer (1 if correct answer, otherwise 0)
    - answer (the actual answer)
    - q\_order (the order of the answer)
  - </item> end of that question and answers

\*\*\* If you are going to create your own QST XML file, try one question first to see how it goes.

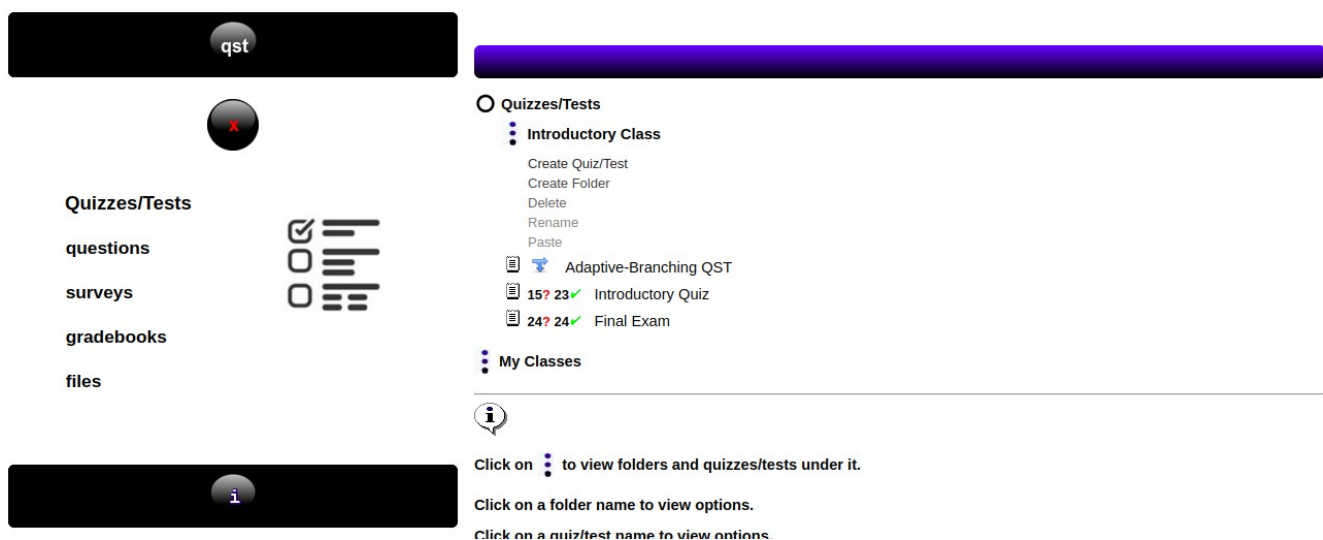
- If there are images in your answer, there will be <ba\_image\_id\_name> <ba\_image\_id> under the answer if you used the **Basic editor**. If you used the **Advanced editor** to create your answers, and there are images in your answers, there will be <adv\_ans\_image\_name> and <adv\_ans\_image> in your answers.

\*\*\*\* Replace all " in your questions and answers with &quot;;  
\*\*\*\* Create a question and Export it, then look at the .qstxml file in a text editor to see the differences for each question and answers created in QST by each editor.

## e. Create a QST

Click on Quizzes/Tests, and then My Quizzes/Tests and *Create a folder* to place your quizzes/tests in (recommended - so they are grouped and easier to find/use later).

My Quizzes/Tests is your own bank. Your QST can be changed at any time while it is in your bank. Once it is pasted into a class it is a copy of your original and may be changed as long as no student has attempted it yet.




Selecting *Create Quiz/Test*, will cause a new window to open with the Create Quiz/Test screen available.

**Add new question** **Add questions from bank** **Cancel**

**Create a Quiz/Test** in folder: **Introductory QST**

Quiz/Test Name:  Max. 50 characters



Enter the Quiz/Test name and select an option from above.

Enter the name of your Quiz/Test and choose one of the two options.

Once you click on one of the selections, a new screen will appear and the QST has been created.

The screen below is the 'Add questions from bank' option.

Click on Focus to see the questions in the QST.

[Add new question](#) [Add the questions](#) [Add questions as group](#) [Delete questions](#) [Focus](#) [Preview](#) [Close](#)

Introductory Quiz

☐ Questions

- ☐ General questions
- ☐ Export questions to test with

☐ Science 6

Select All

1

☐

? MC<sup>1</sup> Airplane classification

2

☐

? MC<sup>1</sup> Hot-air balloon

3

☐

? MC<sup>1</sup> Mass of oxygen in a sealed jar

4

☐

? MC<sup>1</sup> Balloon temperature

5

☐

? MC<sup>1</sup> Purpose of rudder on aircraft

6

☐

? MC<sup>1</sup> Elastic band propeller

7

☐

? MC<sup>1</sup> Drag forces

8

☐

? MC<sup>1</sup> Which of the following celestial objects emits light

9

☐

? MC<sup>1</sup> Analyze a shadow stick investigation and identify

10

☐

? MC<sup>1</sup> Sun height above horizon

You can add questions, delete questions, branch questions, re-order questions and group questions to be chosen randomly.

Click on **Close** when finished to update the Create/Manage Quiz/Test screen.

All question here are Primary Questions.

Click on a question shown to branch it.


As soon as you branch a question, there will be no marks available for the QST, as it would be difficult to understand the value of a mark in this context.

In the GradeBook the branching QST will be shown as done by the user by ? , and you can view it.

You can create an empty QST.

Your QST will appear on the right side main screen.



Click on  to view folders and quizzes/tests under it.

Click on a folder name to view options.

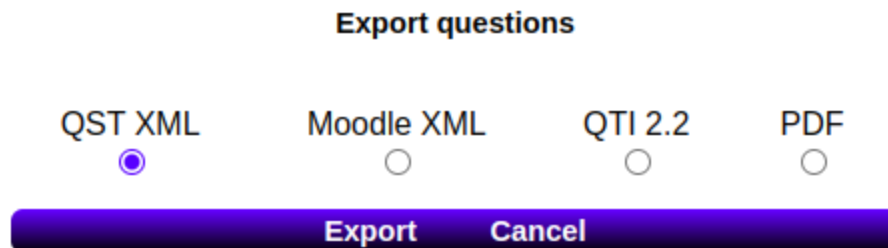
Click on a quiz/test name to view options.

Preview your QST to see how it will appear to your users.

The Preview will show all the questions in the qst.

Branching QST's will only display the Primary questions.

Export the questions from a QST



## f. Make your QST available to your users - Post

Click on the QST you created under Quizzes/Tests and select *Copy*.

Click on the My Classes folder and click on the class you would like to make the

QST available for and select *Paste*.

Now click on the QST you just pasted and select *POST*.

Quizzes/Tests

My Classes

Introductory Class

15?

23

✓

Introductory Quiz

Change

Rename

Delete

Print

View

Post

Copy

Export

25?

25

✓

Final Exam



Click on  to view folders and quizzes/tests under it.

Click on a folder name to view options.

Click on a quiz/test name to view options.

A new screen will appear with the options to make the QST available to your users.

## Introductory Quiz

### Availability

☒ Always ☐ January 1 12:45 am to January 1 12:45 am

Delivery

Display

Duration  minutes

Attempts

Shuffle questions for each user: ☐ Yes ☒ No

Shuffle answers: ☐ Yes ☒ No

☒ Record mark - if multiple attempts records highest mark only if all questions are T/F, Y/N, multiple choice, multiple answer, or matchxng, otherwise records last attempt.

☒ Submissions are viewable

☒ Explanation ☒ Source ☒ Memory

☒ Results/Mark is viewable

Post it

Cancel

Unpost

Select All Students

Unselect All Students

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Shirley Bolat    | <input checked="" type="checkbox"/> Bob Marlie     |
| <input checked="" type="checkbox"/> Bill Cline       | <input checked="" type="checkbox"/> Elvis North    |
| <input checked="" type="checkbox"/> Wendy Goo        | <input checked="" type="checkbox"/> Sancho Perez   |
| <input checked="" type="checkbox"/> Bob Hill         | <input checked="" type="checkbox"/> Bill Roberts   |
| <input checked="" type="checkbox"/> Patricia Herchek | <input checked="" type="checkbox"/> Vladmir Roskov |
| <input checked="" type="checkbox"/> Kim Israel       | <input checked="" type="checkbox"/> Ken Soo        |
| <input checked="" type="checkbox"/> Bimal Gupta      | <input checked="" type="checkbox"/> Bob Smith      |
| <input checked="" type="checkbox"/> Carl Kolotylo    | <input checked="" type="checkbox"/> Sam Woe        |
| <input checked="" type="checkbox"/> Chris Liu        |  |

You may want to deliver your QSTS's differently to acheive your goals.

Sometimes you may want to ask a question based upon a previous question and do not want the user to refer back to the question. Often you want the user to have immediate feedback. Other times only provide feedback at the end, or not at all.

Traditional method of paper assessment - displaying all questions is also available.

### Delivery:

Paper - All Questions

Single Question - Jump

Single Question - Next No going back to previous questions.

Single Question - Answer

Single Question - Branch

### Display:

New Window - QST will appear in a new window, and may be resized.

- \*\* Use this so students cannot use the browser back button.

New Window No resize - QST will appear in a modal and cannot be resized.

QST's containing random questions or branching questions cannot be shuffled.

Have the Administrator create a demo student for you, then you can try different combinations of the options available for Posting the QST.

The demo student will not be counted in the GradeBook as long as they have no marks for a QST.

Delete the demo students mark after you have attempted the QST.

\*\* If you add a student to a class, You must re-post any QST's available to that class so that student has access to them.

## g. Branching Questions

Only True/False, Yes/No, Multiple Choice - Single Answer questions can be branched. A single answer, multiple answers or all answers may be branched.

Add new question   Add questions from bank   Delete questions   Save changes   Preview   Close

### Branching QST

☐ + TF 🔍 I live in North America  
Branch  
Delete Branch  
Cut  
Paste above  
Paste below

View Branching:

Add new question   Add questions from bank   Delete questions   Save changes   Preview   Close

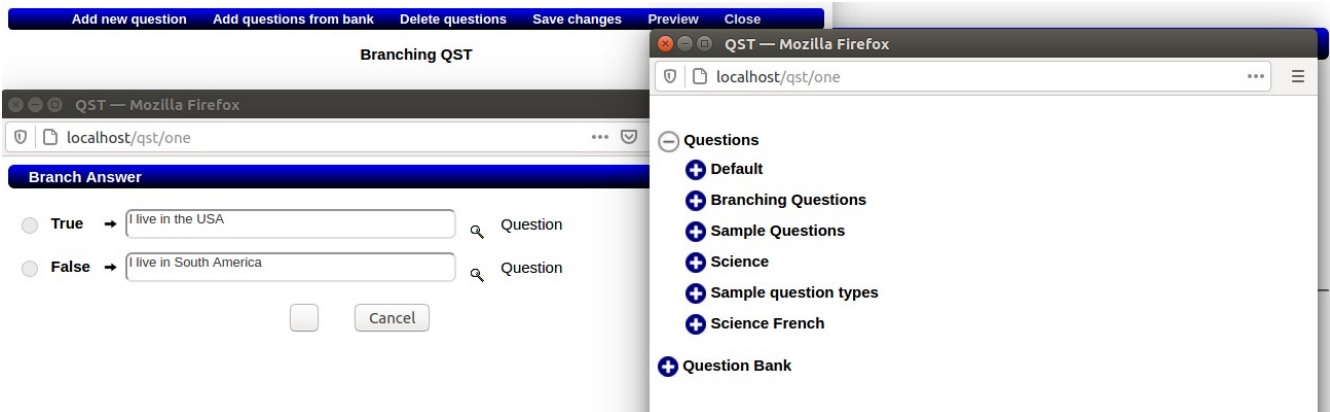
### Branching QST

☐ - TF 🔍 I live in North America  
True → - 🔍 I live in the USA  
True → - 🔍 I live in Western US  
True → + 🔍 I live in California  
False → + 🔍 I live in South America  
False → + 🔍 I live in Canada  
False → + 🔍 I live in South America

Primary questions are the first level questions in a QST.  
Click on a Primary question to branch the answers.



A popup will appear and click on *Question* next to an answer.  
A new popup will appear with your Question Bank questions.  
Clicking on the radio button in front of a question will add the question as a branch for that answer.  
Clicking on *Question* for the next answer will clear your previous selection in your Question Bank, and you can now choose a new question.



If an answer is not branched, then if that answer is selected by a user, the QST will continue to the next Primary question.

Primary Questions may be re-arranged in order and still contain the same branching questions under them.

Usually Primary Questions would be something you would ask of every user, however, some QST's may only contain one Primary Question, and all the answers lead in separate directions.

Deleting a Primary Question deletes all branching questions under it.

If you delete a branch under a question, all questions and branches beneath it will be deleted.

Because branching questions can get very complex quickly, it is best to map out your design before beginning to save you time.

There is no limit to the level of branching under a question.

## h. Changing a QST

You may only change a QST if it has not been taken by a student yet.

You can add questions, delete questions, alter the order of the questions, add question groups and specify how many questions to choose from the group and the mark for each question and alter the questions in a group. Additionally you can show SOURCE - display the folder the questions came from.

If you add a Branching/Adaptive question to a QST, all the marks will be removed for the QST as they become very difficult to interpret.

### Select a QST to Change

### Change QST screen

[Add new question](#)[Add questions from bank](#)[Delete questions](#)[Save changes](#)[Preview](#)[Close](#)

### General Quiz

[Show Source](#)

- ☐ 1. (1) MC 🔍 What is the bird
- ☐ 2. (2) MA 🔍 What applies to the animal
- ☐ 3. (1) MC 🔍 Airplane classification
- ☐ 4. (1) MC 🔍 Identify the statement that best defines the term LD50
- ☐ 5. (1) MC 🔍 Construct an inference based on raw data from a table
- ☐ 6. (1) MC 🔍 A person with AIDP is expected to have a change in
- ☐ 7. (1) MC 🔍 Onion root tip cells
- ☐ 8. (1) MA 🔍 What else applies to animal

### Displaying where the questions came from

[Add new question](#)[Add questions from bank](#)[Delete questions](#)[Save changes](#)[Preview](#)[Close](#)

### General Quiz

[Hide Source](#)

- ☐ 1. (1) MC 🔍 What is the bird *Source: Default*
- ☐ 2. (2) MA 🔍 What applies to the animal *Source: General questions*
- ☐ 3. (1) MC 🔍 Airplane classification *Source: Grade 6 Science 1*
- ☐ 4. (1) MC 🔍 Identify the statement that best defines the term LD50 *Source: Grade 9 Science 1*
- ☐ 5. (1) MC 🔍 Construct an inference based on raw data from a table *Source: Grade 9 Science 2*
- ☐ 6. (1) MC 🔍 A person with AIDP is expected to have a change in *Source: Grade 12 Biology 1*
- ☐ 7. (1) MC 🔍 Onion root tip cells *Source: Grade 12 Biology 2*
- ☐ 8. (1) MA 🔍 What else applies to animal *Source: General questions*

**Add questions from your Question Bank as a group**

## General Quiz

### Questions

#### General questions

##### Environment

Unselect All

- 1 ☒ ? MA<sup>2</sup> What applies to the animal
- 2 ☒ ? MX<sup>1</sup> QST MX
- 3 ☒ ? MC<sup>1</sup> Equation
- 4 ☒ ? TF<sup>1</sup> Youtube Video
- 5 ☒ ? TF<sup>1</sup> Test for wcag
- 6 ☒ ? TF<sup>1</sup> Equation
- 7 ☒ ? MC<sup>1</sup> Dots
- 8 ☒ ? MC<sup>1</sup> Blue Sky
- 9 ☒ ? P<sup>3</sup> Write how a engine works
- 10 ☒ ? MA<sup>1</sup> What else applies to animal

##### Export questions to test with

Grade 6 Science 1

Grade 9 Science 1

Grade 9 Science 2

Show Source

- ☐ 1. (1) MC 🔍 What is the bird
- ☐ 2. (2) MA 🔍 What applies to the animal
- ☐ 3. (1) MC 🔍 Airplane classification
- ☐ 4. (1) MC 🔍 Identify the statement that best defines the term LD50

about:blank - Brave

about:blank

Select  questions randomly from group.  
Each question is worth  marks.

Continue Cancel

New question group added to the QST

[Add new question](#)[Add questions from bank](#)[Delete questions](#)[Save changes](#)[Preview](#)[Close](#)

### General Quiz

[Show Source](#)

- ☐ 1. (1) MC 🔍 What is the bird
- ☐ 2. (2) MA 🔍 What applies to the animal
- ☐ 3. (1) MC 🔍 Airplane classification
  - Branch
  - Delete Branch
  - Cut
  - Paste
- ☐ 4. (1) MC 🔍 Identify the statement that best defines the term LD50
- ☐ 5. (1) MC 🔍 Construct an inference based on raw data from a table
- ☐ 6. (1) MC 🔍 A person with AIDP is expected to have a change in
- ☐ 7. (1) MC 🔍 Onion root tip cells
- ☐ 8. (1) MA 🔍 What else applies to animal
- ☐ 9 - 11. Select  Value of each question  Cut Paste
  - ☐ MC Recognize an example of an inorganic substance
  - ☐ MC What is the bird
  - ☐ MC Airplane classification
  - ☐ TF Equation
  - ☐ MA What applies to animal
  - ☐ P Tell a little about yourself
  - ☐ MX QST MX

When making changes to the quiz always click **Save changes** when you are done.

Another example of adding branching/adaptive questions

Change Quiz/Test - Brave

about:blank

Add new question

Add questions from bank

Delete questions

Save changes

Preview

Click

General Quiz

Show Source

QST - Brave

Not secure | 192.168.1.6/qst/one

Branch Answer

Group II

→

Equation

Question

Group III

→

Question

Group V

→

Question

Group VI

→

Question

Add Branch

Cancel

MX QST MX

YN Sky is blue

MA PDF

MA Prime numbers

SA When invented relativity

2022 Jeep Wrangler | Je...

QST Quiz/Survey/Test

+

QST - Brave

Not secure | 192.168.1.6/qst/one

Questions

General questions

Environment

1

☒

? MC<sup>1</sup> Equation

2

☐

? TF<sup>1</sup> Youtube Video

3

☐

? TF<sup>1</sup> Test for wcag

4

☐

? TF<sup>1</sup> Equation

5

☐

? MC<sup>1</sup> Dots

6

☐

? MC<sup>1</sup> Blue Sky

Export questions to test with

Grade 6 Science 1

Grade 9 Science 1

Grade 9 Science 2

Grade 12 Biology 1

Grade 12 Biology 2

Export for demo

Default

Branching

Sample Questions

Question Bank

Branching

Sample Questions

Question Bank

## Result of adding above branching/adaptive question

**Add new question** **Add questions from bank** **Delete questions** **Save changes** **Preview** **Close**

**General Quiz**

Show Source

☐ MC 🔍 What is the bird

☐ MA 🔍 What applies to the animal

☐ MC 🔍 Airplane classification

Group II   ➔   +   🔍 Equation

Branch

Delete Branch

☐ MC 🔍 Identify the statement that best defines the term LD50

☐ MC 🔍 Construct an inference based on raw data from a table

☐ MC 🔍 A person with AIDP is expected to have a change in

☐ MC 🔍 Onion root tip cells

☐ MA 🔍 What else applies to animal

☐ Select 3   Value of each question 2   Cut   Paste

☐ MC Recognize an example of an inorganic substance

☐ MC What is the bird

☐ MC Airplane classification

☐ TF Equation

☐ MA What applies to animal

☐ P Tell a little about yourself

☐ MX QST MX

☐ YN Sky is blue

Notice how the Marks are removed because it is now branching.

## i. GradeBooks



Click on **gradebooks**, and then click on a class name to view the GradeBook for that class.

The screenshot displays the Blackboard user interface. On the left is a dark vertical sidebar containing several icons and labels: a 'qst' icon at the top, followed by a red 'x' icon, then a list of links: 'quizzes/tests', 'questions', 'surveys', 'GradeBooks', and 'files'. Below these links is an icon representing a checklist or document. At the bottom of the sidebar is an information icon ('i'). The main content area on the right has a purple header bar. Below it, there's a section titled 'Introductory Class' preceded by three vertical dots. A speech bubble icon contains an 'i'. The text below explains that clicking on the dots or class name views students under it, and clicking on QST/Assignment numbers provides options. A legend follows, defining symbols used in the course: a plus sign for questions to be marked, a green star for bonus marks, a question mark for branching QST completed, 'IP' for In Progress, 'A' for Attempted - times, and 'S' for Survey.

**Left Sidebar Navigation:**

- quizzes/tests
- questions
- surveys
- GradeBooks
- files

**Main Content Area:**

### Introductory Class

Click on or class name to view students under it

Click on QST/Assignment number for options

**Legend:**

- + Contains questions to be marked
- \* Bonus marks
- ? Branching QST completed
- IP In Progress
- A Attempted - times
- S Survey

quizzes/tests

questions

surveys

GradeBooks

files

Introductory Class

Assignment
 Display
 GradeBook

QST/Assignment:			
	1 <sub>20</sub>	2 <sub>50</sub>	3 <sub>30</sub>
Total of weights = 100 %			
1 Bhirley Bolat	5/4.3	--	4.3
2 Adesh Bahart	10/8.7	--	8.7
3 Rob Crow	10/8.7	IP	8.7
4 Xiam Gupta	3/2.6	--	2.6
5 Patricia Herchek	20/17.4	30/30.0	47.4
6 Carl Kolotylo	9/7.8	--	7.8
7 Gumba Malkov	15/13.0	--	13
8 Sancho Perez	10/8.7	--	8.7
9 Ken Soo	5/4.3	13/13.0	17.3
10 Mao Tung	3/2.6	--	2.6
Averages:	9.0/7.8	21.5/21.5	

Click on or class name to view students under it

Click on QST/Assignment number for options

actual mark/weighted mark

- In the **Stats** screen for Quizzes and Tests, click on the question **Type** to view

the question and see the number of times each answer was selected by the class.

- Also view which users got the question correct/incorrect/no answer/partial answer.

**Stats**   **Introductory Quiz**   **Close**

Submitted: **10**

[↓ QST Details](#)

Totals for class:			60	73	17	0	10
Question	Type	Mark	✓	✗	⊖	P	#
1	MC	1	8	2			10
2	MC	5	2	8			10
Ken Soo Sancho Perez Xiam Gupta Gumba Malkov Mao Tung Adesh Bahart Shirley Bolat Carl Kolotylo							
3	MC	1	8	2			10
4	MC	3	6	4			10
5	MX	1	4	5	1		10
6	MC	1	2	8			10
7	P	1	3		7		10
8	MA	3	3	7			10
9	MA	1	5	5			10
10	MC	1	3	7			10
11	MC	1	3	7			10
12	MC	1	5	5			10
13	SA	1	1		9		10
14	MA	1	3	7			10
15	TF	1	4	6			10

Stats provides immediate actionable results.

Download QST Details to perform deep analysis on the QST results.

## ○ Introductory Class

 Assignment

 Display

 GradeBook

QST/Assignment: 1<sub>20</sub> 2<sub>50</sub> 3<sub>30</sub> Total of weights = 100 %

### Introductory Quiz

Delete

View

Stats

Marks 23

Weight 20%

1 Bhirley Bolat	5/4.3	--	4.3
2 Adesh Bahart	10/8.7	--	8.7
3 Rob Crow	10/8.7	IP	8.7
4 Xiam Gupta	3/2.6	--	2.6
5 Patricia Herchek	20/17.4	30/30.0	47.4
6 Carl Kolotylo	9/7.8	--	7.8

Click on **Weight** to set the % value of the QST in the Total Mark.

When a students starts a QST, it will be shown as **IP (in progress)** in the GradeBook.

Once a QST is started, an end time is set for the QST for that user.

Once they have submitted the QST, it will show their score.

If they did not submit the QST before the time is up, the QST will still show as **IP**, and the instructor will have to click on the **IP** to View/Mark and **submit** the QST for them.

Then a mark will be shown. May have to refresh Display.

If the QST is posted with multiple attempts and Record Mark is **not** chosen, in the GradeBook the number of attempts at the QST will be shown **A-2** for 2 attempts.

If the QST is posted with multiple attempts and Record Mark is chosen, a mark will be shown for the QST in the GradeBook. The number of attempts will not be shown as only the highest mark is kept and therefore it is likely the student will use all the attempts to improve on their mark.

Click on a student's **mark** to view/mark their submitted Quiz/Test.

In the case a student has to **Resume** a QST, click on **IP** for their QST and click **Resume**. This will allow them to re-log in to that QST, as long as there is time remaining in it for them.

If they have been locked out for more than a minute, consider adding some time to their QST. Adding time adds time to the end time of the QST for that user.

A QST cannot be **Resumed** after the end time has passed unless more time is added to the users QST and it is still available under **Posted**.

**Resume** is intended to let users continue an important QST.

The QST will be displayed to the user as having **0 attempts**.

The Time remaining shown to them will be the time difference from their last question answered and the end time of their QST.

They will be restarted at the last question they answered.

Only resume a QST for a user if it is set to only **1 attempt**.  
Otherwise they can just attempt it again.

Only **Paper-all questions**, **Single question-jump** and **Single question-next** Delivery styles will work with Resume.

Resume will **not** work with **Display Modal - no resize** chosen.

<b>11 Robert Stall</b>	<b>IP</b>	<b>1/1.2</b>	--	--	<b>1.2</b>
	Delete				
	Bonus				
	View/Mark				
	+ Time				
	Resume				

You can **add time** to a users QST by clicking on **IP** for their QST and click **+ Time**.  
Adding time to their QST will not change their Time Remaining display (unless they are resuming a QST), so advise them to keep answering questions until you notify them to Submit their QST or QST display tells them too.

You may **delete** a student's QST here if you would like to give them another attempt.  
If the QST is still available the student may retry it again.

If the QST is over, the student will not be included in the average for that QST as they do not have a mark.

The GradeBook always shows all the students in the class.

- \* To see averages for a QST a weight must be given to it.
- \* For QST's and Assignments to show in the downloaded GradeBook they must be given a weight(%). Weights do not show in dwonloaded GradeBook.
- \* Students that did not take a QST, will not have a mark for that QST and will not be included in the average for that QST.

Introductory Class										Assignment	Display	GradeBook
QST/Assignment:	1 <sub>10</sub>	2 <sub>20</sub>	3 <sub>20</sub>	4 <sub>15</sub>	5 <sup>S</sup>	6 <sub>0</sub>	7 <sub>0</sub>	8 <sub>20</sub>	9 <sub>15</sub>	Total of weights = 100 %		
1 Carl Kolotylo	12/8.0 Delete Bonus View/Mark	14/18.7		22/13.2				20/13.3	15/15.0	68.2		
2 Sam Black		0/0						--	--	0		
3 Bob Cline	1/0.7							--	--	0.7		
4 Bill Hill	0/0	0/0		7/4.2	✓	A-1	0	13/8.7	14/14.0	26.9		

Clicking on View/Mark on a students QST mark will show you the following screen where you can also Print the students marked QST or Save it as a PDF to keep for

your records or email to your students. The time they answered each question is displayed also.

General Knowledge Quiz - Patricia Herchek

Print / PDF

Started: July 1, 9:45 pm Submitted: July 1, 9:45 pm

Marks: 3 / 7

Bonus: 0

Hide Source

Show Memory



QST  
Results

Marks: 3/7  
Bonus: 0

3 ✓ Correct  
0 ✗ Incorrect  
4 ⚪ No Answer  
P Partial mark

✓ 1<sup>1</sup> ✓ 2<sup>1</sup> ✓ 3<sup>1</sup>  
⚪ 4<sup>1</sup> ⚪ 5<sup>1</sup> ⚪ 6<sup>1</sup>  
⚪ 7<sup>1</sup>

1. (1) What is the bird shown below?



Correct

☐ woodpecker

☐ owl

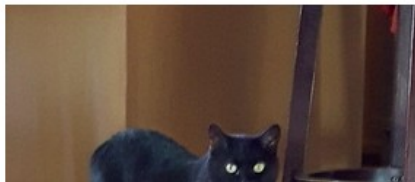
☐ rat

✓ ☒ pheasant

Answered on (M/D/Time): 7-1-2145

Source: Default

2. (1) Select all that apply to the animal shown below?



There is a Comments section at the bottom of the QST.

**5. (1) Match the city to the country.**

*No Answer*

montreal

✓ canada

paris

✓ france

milan

✓ italy

Answered on (M/D/Time): 0

---

**6. () Write how an engine works.**

*No Answer - 0 pts*

Correct Answer:

An engine works by gas exploding in the cylinders causing the cylinders to go up and down, which in turn rotates the crankshaft which turns the drive shaft, which then turns the wheels

Answered on (M/D/Time): 0

---

**Comments**

Clicking on the word will display a textbox for your comments.  
The text will not be saved and will display in the PDF or printed QST.

6. 0 Write how an engine works.

*No Answer - 0 pts*

Correct Answer:

An engine works by gas exploding in the cylinders causing the cylinders to go up and down, which in turn rotates the crankshaft which turns the drive shaft, which then turns the wheels

Answered on (M/D/Time): 0

---

#### Comments

Creating an **Assignment** will allow you to also set a mark for the assignment and a weight.

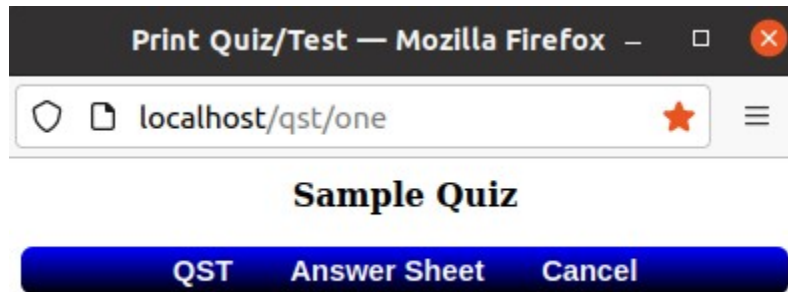
Click on -- under the Assignment to add a Mark for a user.

Downloading the GradeBook (in .csv or .json format) includes QST's and Assignments with a mark for each student. If the student did not attempt a QST, there will be no mark in the download for them.

The QST must have a weight(%), otherwise it will not be included in the download.

## i. Print a QST to dispense to class

Click on Quizzes/Tests and then My Quizzes.  
Click on a QST shown and click Print.



Click **QST**.

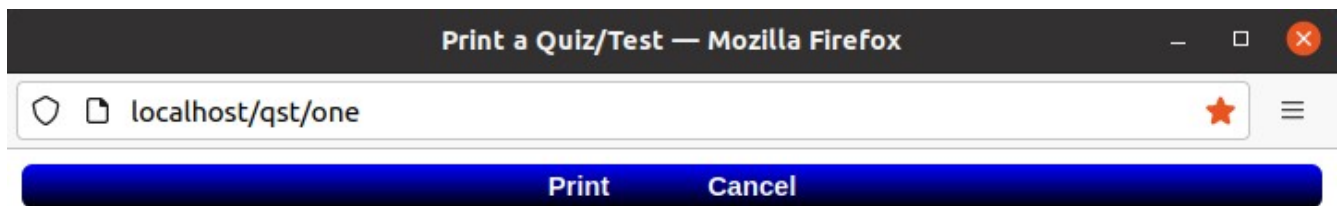
- \* It will display equations, images, etc..
- \* Put letters of the alphabet in the beginning of answers if you need to see a, b, c, d, etc. in the answers and in the answer sheet.

When you click Print, you can choose to also save the QST as a PDF.

If you save it as a PDF, if you have LibreOffice you can open the PDF, make changes to the QST as suits your needs then print it for your students. LibreOffice may not always display the PDF correctly.

You can also convert the PDF to .docx format at <http://adobe.com/acrobat/online/pdf-to-word.html> and make changes to it in Microsoft Word and then print it for your users.





## Sample Quiz

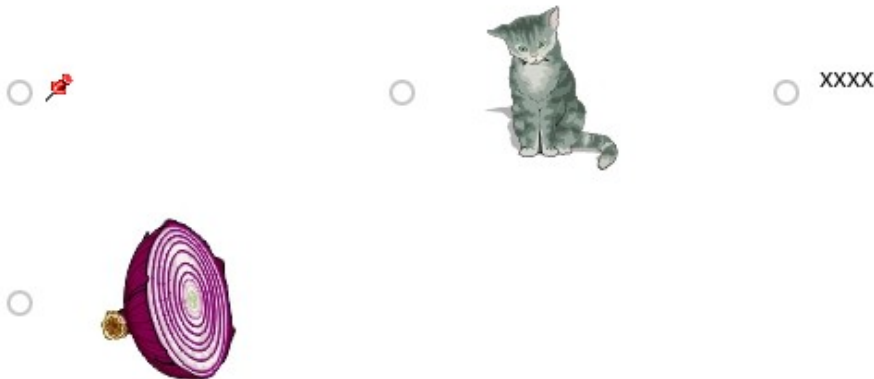
(Questions: 12 Marks: 12)

Institute : \_\_\_\_\_

Class : \_\_\_\_\_

Name : \_\_\_\_\_

### 1. (1) MC 3 columns basic



## 2. Students

Students can log into the QST on the homepage, or if using a phone browser click on Phone browser.

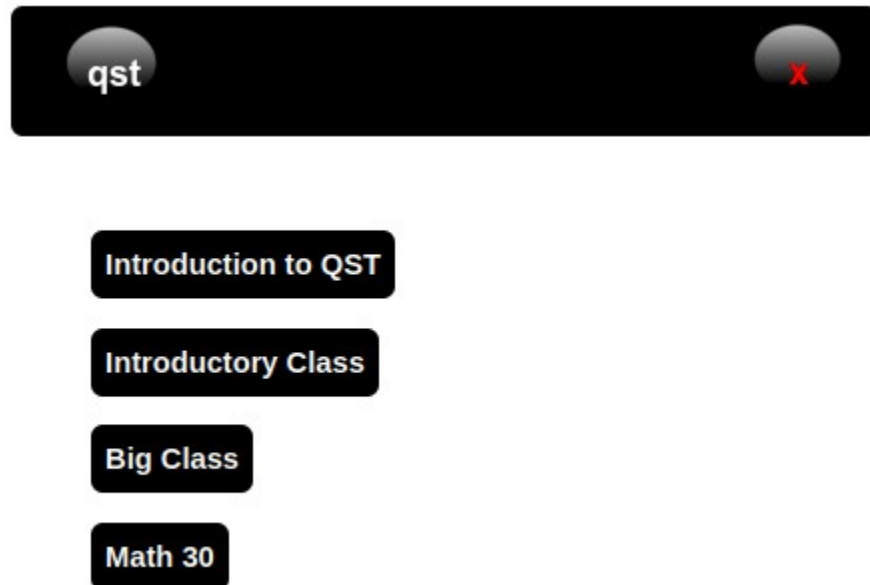
Phone browser displays one question at a time (no matter what setting is chosen for Delivery when Posting a QST).

Phone browser partially works with screen readers and our work to make it WCAG AA compliant is ongoing.

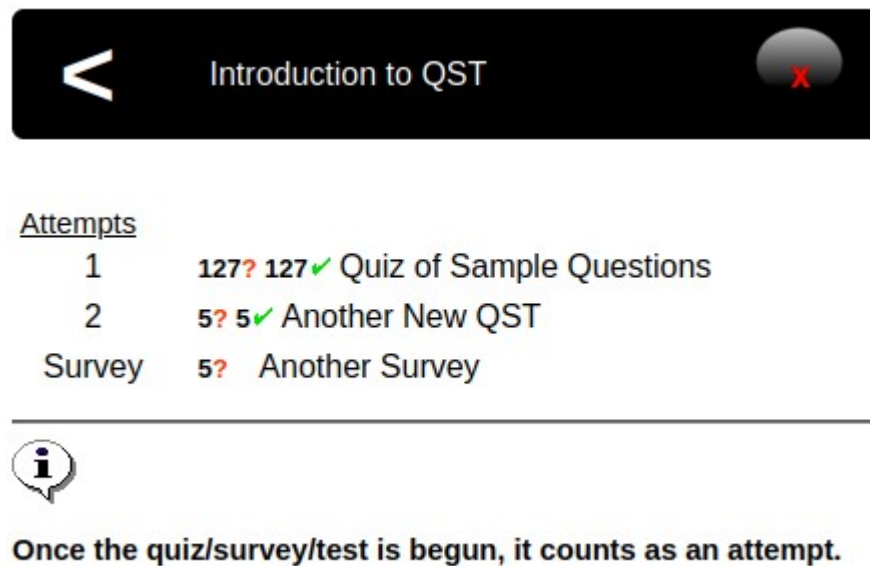
If you want your users to go to phone browser the url would be:  
[https://your\\_web\\_server\\_name/mobile\\_qst.htm](https://your_web_server_name/mobile_qst.htm)

Read 'Run QST on your laptop for your users' at <https://qstonline.org/faq.htm> to find the IP address of your QST installation for users on your lan to access it.

## Phone Browser



Clicking on a Class will display the QST's available.



Clicking on the QST name will start the QST.  
You can only Submit the QST after you have gone through **all** the questions.

In **normal mode**, after the students have logged in, the left side of the screen shows their name and optional photo along with the classes they are in.

Clicking on a class name displays the QST's available to the student on the right.  
 Selecting a QST will display a popup with instructions for the QST.  
 The QST is only marked as attempted after the student selects OK in the popup.

qst

Introduction to QST

Advanced QST

X

Bob Hill

Introduction to QST

Attempts

1    143 ? 143 ✓ Quiz of Sample Questions

i

Once the quiz/survey/test is begun, it counts as an attempt.  
 Click on quiz/survey/test name for options.

If a student is taking a QST Paper style or Single question-Jump, they can unselect the question checkbox on the right side of the screen of an answered question so they will notice to review it before Submitting the QST.

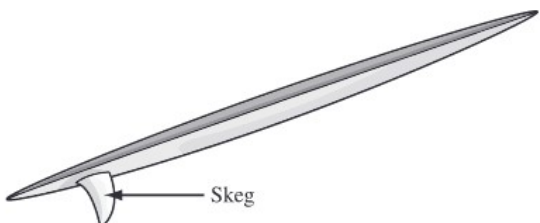
Selecting an answer automatically saves it to the server and marks it as Answered. Short Answer and Paragraph questions click Save Answer to do the same.

Science 6

Questions: 25    Marks: 25

➤

1. <sup>(1)</sup> A skeg is an immovable fin that is fixed onto the rear underside of a surfboard. It improves the stability of the surfboard.



The skeg on a surfboard is **most similar** in function to which component of an airplane?

☐ Horizontal stabilizer

☒ Vertical stabilizer

☐ Wing

☐ Flap

#1 Saved

Time Remaining  

4

Submit QST

Questions Answered

☒ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

☐ 8

☐ 9

☐ 10

☐ 11

☐ 12

☐ 13

☐ 14

☐ 15

☐ 16

☐ 17

☐ 18

☐ 19

☐ 20

☐ 21

☐ 22

☐ 23

☐ 24

☐ 25

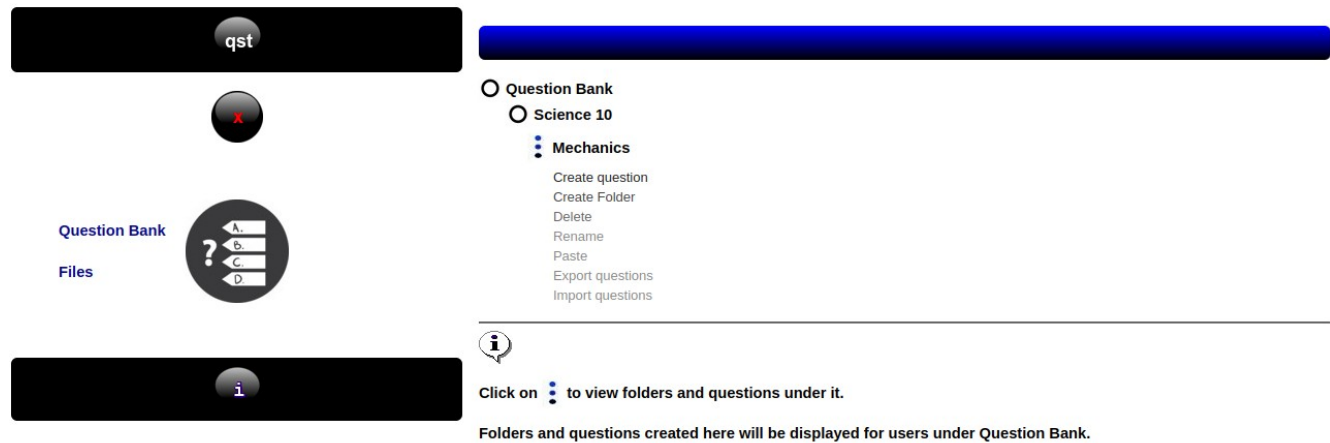
The questions are saved to the server as the students answer them.  
 If a students computer goes down or they lose their internet connection they can be allowed to Resume the QST.

Having the server on your network greatly reduces the chances of network loss and

ensures the privacy of your users information.

### 3. Question Bank Admin

The screen is similar to the Instructors screen, but the user can only create/export/import questions and make folders in the bank.



They have access to the whole Question Bank and questions placed in here are available to all instructors in the organization.

### 4. Mobile/Phone/Lockdown browsers

#### Mobile/Phone

This is only for students to take a QST.

QST is available on both android and iphone (Safari) for students.

QST delivery via the android app or phone browser is single question-next.

On the login page there is Phone Browser, which adjusts the screen to fit for all phones. Use this if you do not have the app for your phone.

It provides the same display as the android apps do.

QST's delivered by the phone browser option allow the user to use the back buttons in the browser and they can return to previous questions.

In QST's delivered through the **android app** the user only has the option to move forward through the questions. They cannot return to a previous question.

You will need to provide the students with a server name (the url to your qst installation home), along with their usernames and passwords.

The server name must be a valid internet domain name or a valid internet IP number.

- qst-android-http.apk does not require a certificate and can be

used on your local network.

- In server put your local network IP of your QST server.

QST for android is available on Google Play and also at QST on sourceforge.net . Sourceforge has both versions.

## **Lock down browsers**

You may want to use Chrome Kiosk Mode to lock down the browser on chrome managed devices or Chrome on Windows.

Microsoft Edge Kiosk Mode is also available.

Safe Exam Browser may be another option you might want to consider.

All are free.