# TECHNOLOGY ENHANCED ASSESSMENT
# Creating an online assessment using the OU Virtual Microscope – a quick starter guide

## Contents

# Creating an online assessment using the OU Virtual microscope – a quick starter guide.

This instructional guide will show you how to create an online assessment using the VM and how to embed the assessment into blackboard. The assessment will be created using a Google Form. Google Forms allow you to make a survey or poll, give students a quiz, or collect other information in an easy, streamlined way. Google Forms is a free and open resource available to any user. This starter guide has been created as quick instructional demo on how to create an online petrological assessment in conjunction with the OU virtual microscope. This guide is intended to enhance the utilisation of the virtual microscope at university level for the purposes of teaching and learning.

## Section 1 – Creating a Google Form

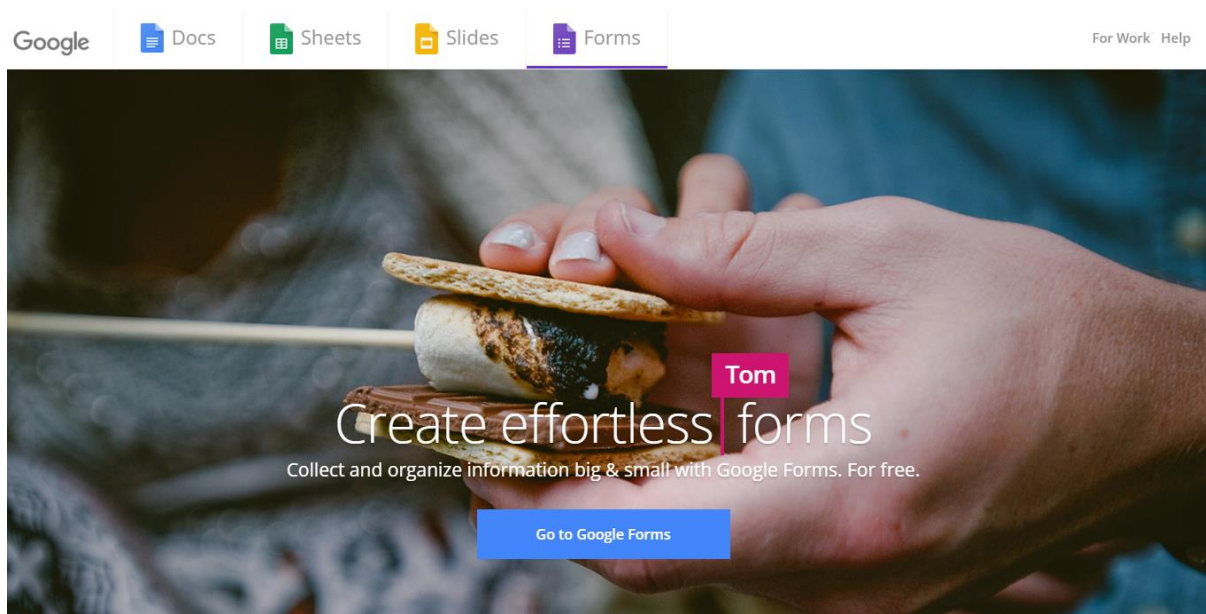In this section you will be guided through the steps on how to create an online assessment using Google Forms.



Figure 1: Main welcoming screen to create a Google Form

### Step 1.1 Creating your Google account

- To create a google form you will first need a google account. You can set up a google account by going to https://myaccount.google.com/intro and create your new google account.
- However, if your email domain is already powered by google, then you can use this account. It would be preferable to use your university email when creating university assessments.
- You may be prompted to set-up your 'Google Drive'. If so, follow the instructions and complete the set up. When creating Google Forms, they will automatically be saved onto your Goole Drive avoiding loss and mislocation.

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## Step 2.1 Creating a new Google Form

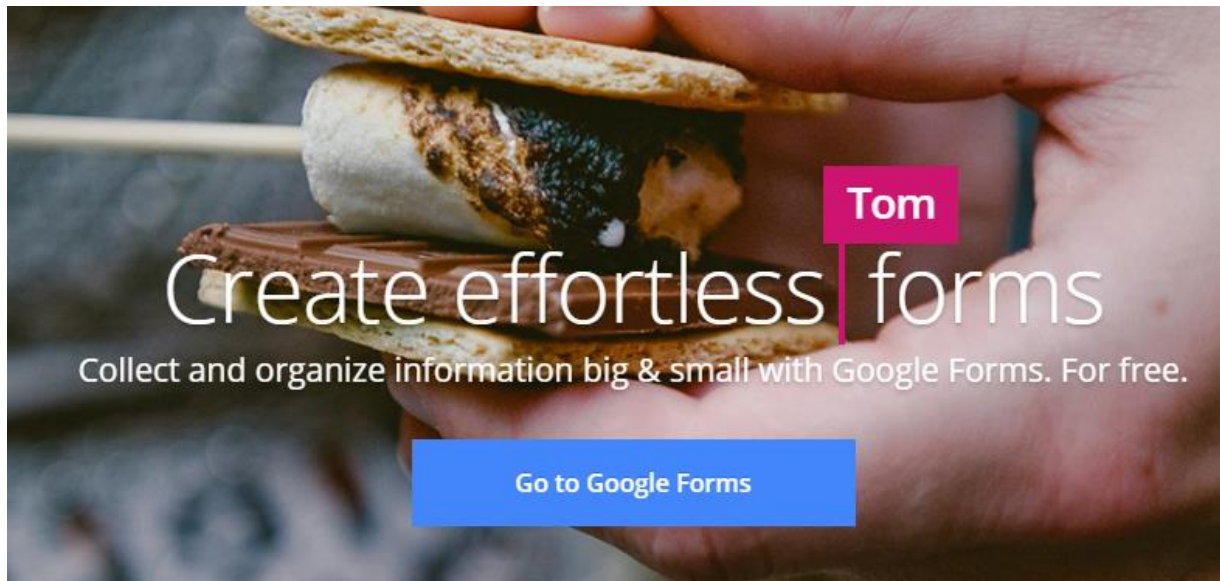- Sign into your google account and navigate to https://www.google.com/forms/about/ *(fig 1)*



Figure 2: Go to Google Forms – click to begin creating a from.

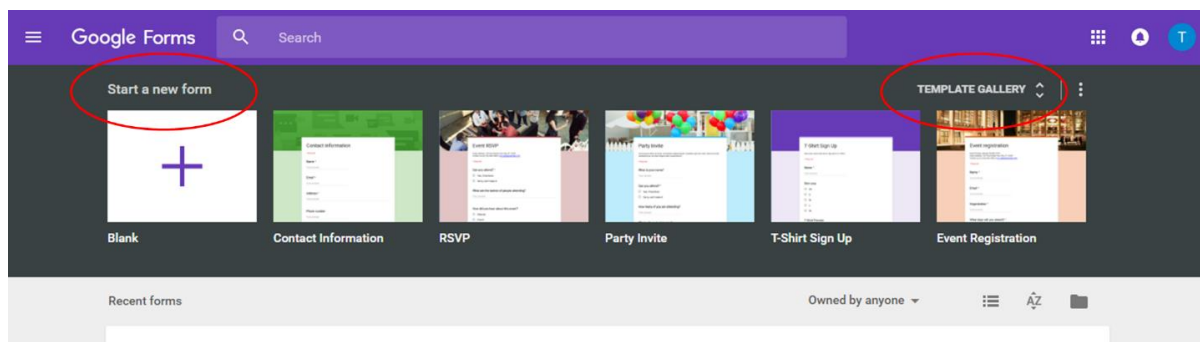- Click on "Go to Google forms".



Figure 3: Start a new Google Form interface. Note drop down gallery menu.

- To the left of the screen you should see under "Start a new Form" 6 different selections. To the right of the screen you should see the dropdown option to expand the "Template Gallery" *(fig 3)*.
- Open the template gallery and you should see a wider selection of Google forms to create. They are divided into; personal, work, and education.
- Under education select the "Assessment" form. Click the "Assessment" form to begin creating a new Google Form *(fig 4)*.
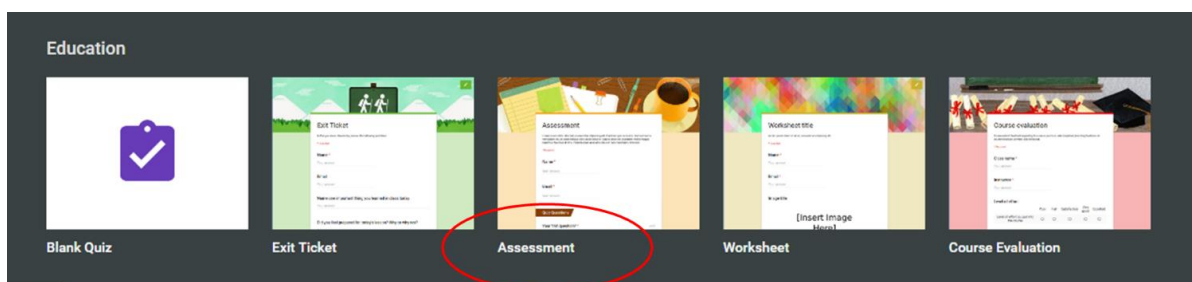


Figure 4: Select the assessment form in the educational category of Google Forms.

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## Step 3.1 Customizing and editing your Google Form.

- Before you create creating a Google Form you will be prompted to 'take a tour'. It is recommended that you take the tour to familiarise yourself with Google Forms.
- Begin editing your assessment by adding a title and description. At the top of the form, click on the pre filled text to remove the text and edit accordingly. Add and suitable title and a brief description/instruction.
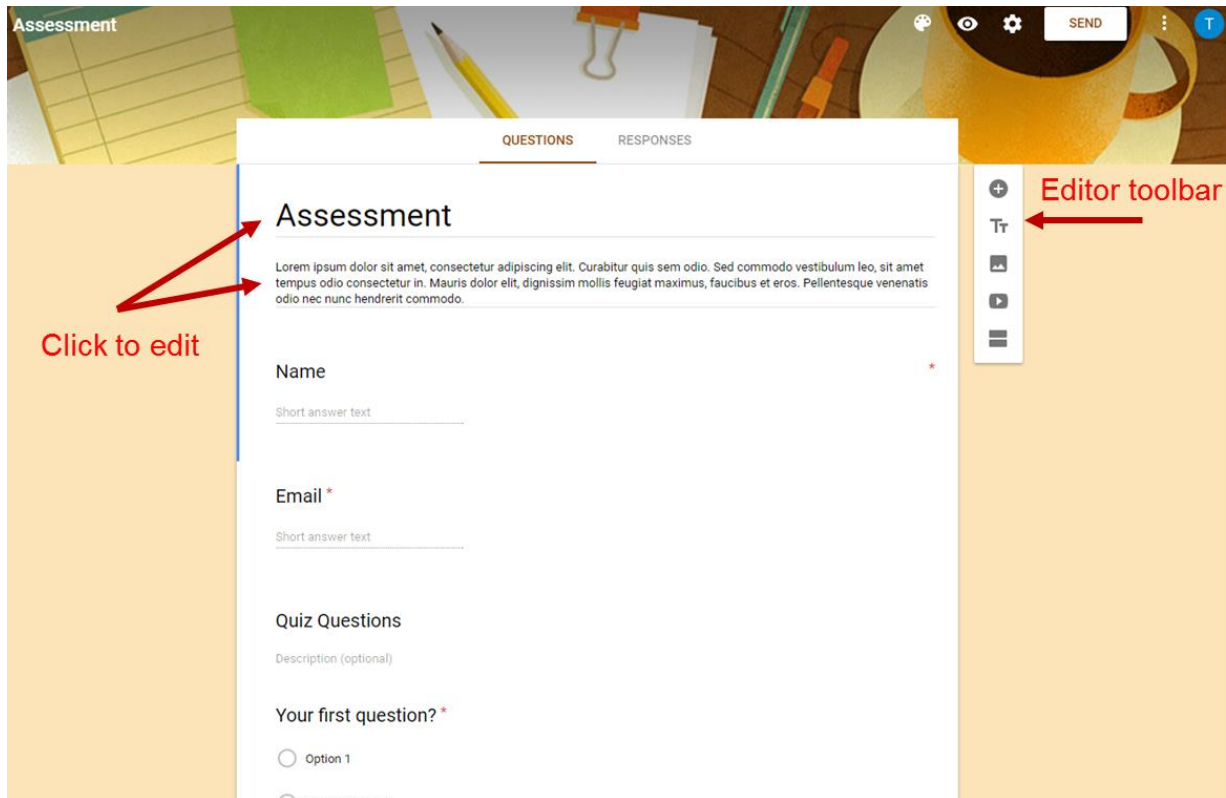


Figure 5: Begin to construct your Google Form assessment

- Following the title, you will see "Name" and "Email". These need not be edited as they will be needed for grading. You may want to include a "Student Number" section. To do this simply click the add button located to the right of the form to create a new entry. Click on the new entry, and under the question type drop down select short answer. Type the question and "Student Number" and make it a required question. This will now record the student number along with the student name and email *(fig 5 & 6)*.
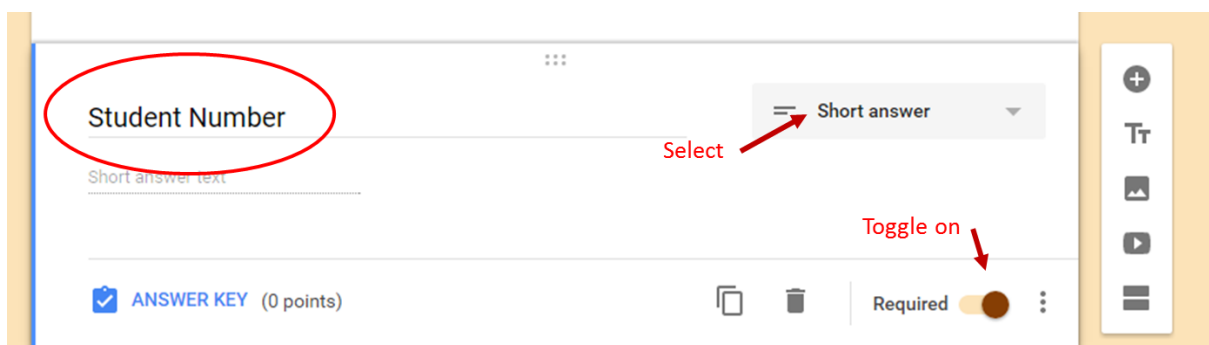


Figure 6: Edit your assessment entries to add a 'student number' value.

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- To add you first question, click on the add button again. Type your question. Now select the answer type. For the purposes of this form we will use 'multiple choice' or 'checked boxes'.
- Once your question is created, begin to add answers to the question. To add additional answers, click 'add option' to insert a new answer. 4 to 5 options should suffice.
- When the question and the answers have been edited, adjust the answer key to select the correct answers. Click on 'Answer Key' and chose the correct answer.
- Finally, make the question a required question by turning on the 'required' button.
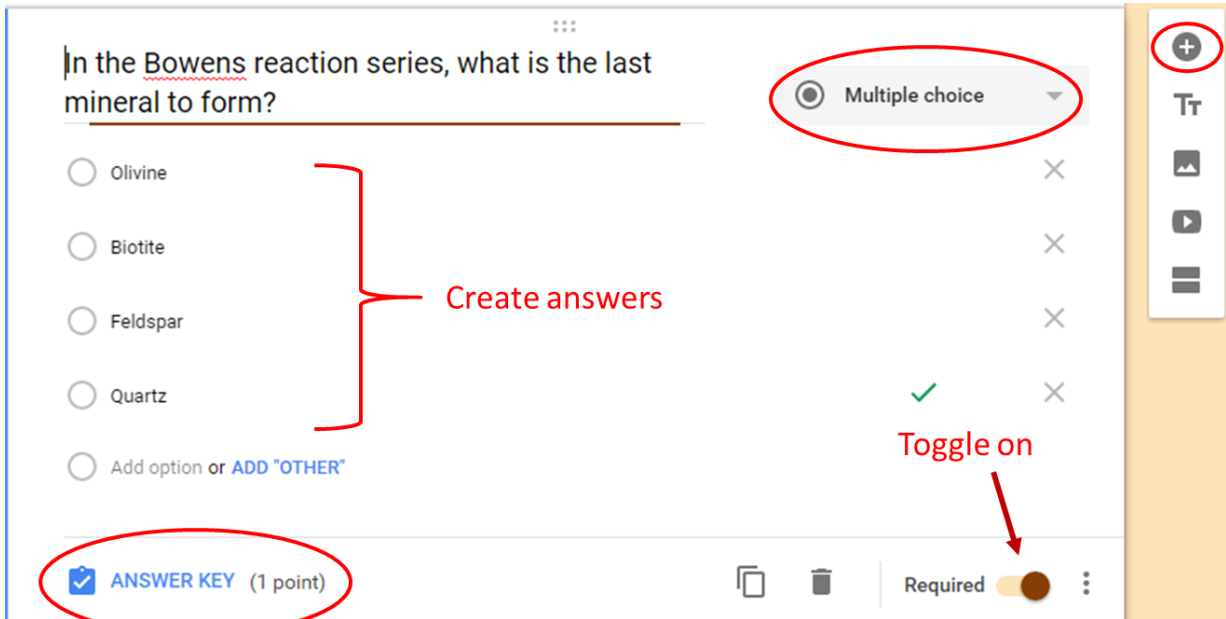- Continue to add questions until your assessment is completed *(fig 7 & 6)*.


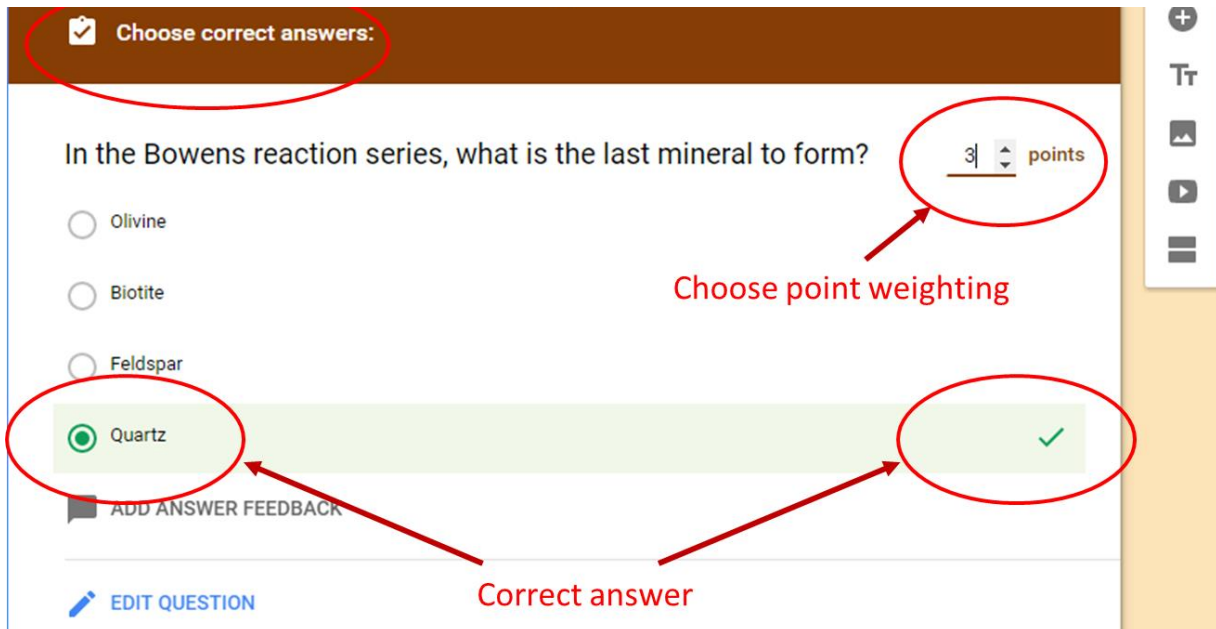
Figure 7: Constructing your assessment questions



Figure 8: Constructing your assessment questions

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# Section 2 – Incorporating the VM into your Google Form

In this section we will begin to construct an assessment using a Google Form with the incorporation of the OU Virtual Microscope. The same steps outlined in section 1 will still apply but features of the Virtual Microscope will now be included.

## Step 1.2 Structuring your assessment

- Before including the VM into your assessment you need to spend time designing your assessment first. This will be determined on the course material you have covered and the advance level of your class. You may want to create an assessment on a particular topic (e.g. the twinning patterns of feldspars) or as an end of term MCQ assessment covering a range of topics.
- You will need to carefully select the OU Virtual Microscope samples you wish to include by browsing the collections and structuring your questions around those samples.
- Once thought has been given to the assessment and the design has been drafted, we can begin to build questions on to the Google Form.

## Step 2.2 Using the share feature

The VM allows you to use the 'share' feature. This allows the student to navigate to the exact view that the instructor wishes the student to view.

- Open the VM viewer of your desired sample. Pan to the area you want the student to view.
- On the bottom right hand corner of the VM viewer you will see the 'share' button. Click the 'share' button.
- A box should appear stating "Share the current view using the link below" with a link provided. This link allows the student to view that particular view of the thin section *(fig 9)*.
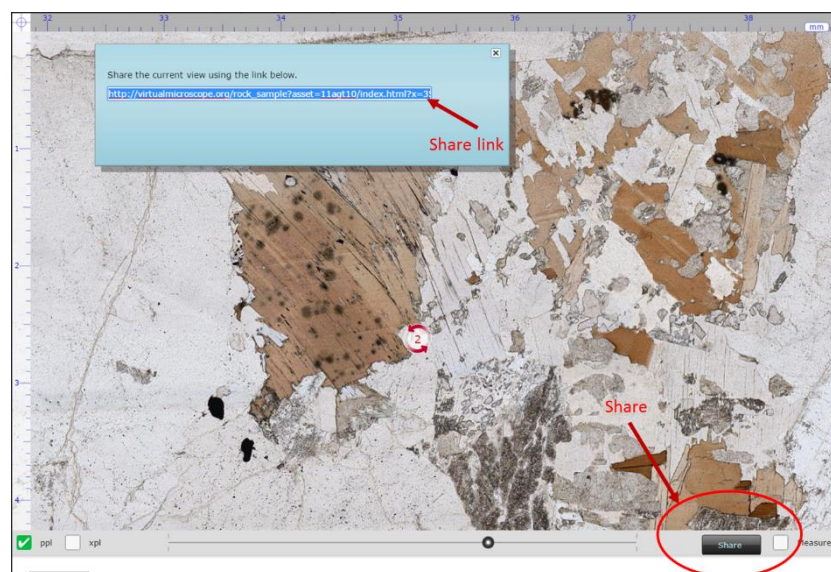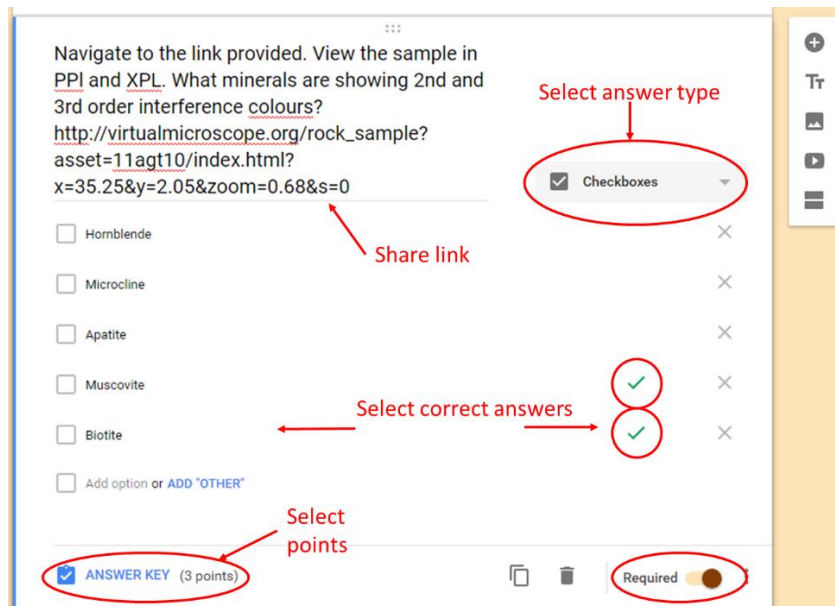


Figure 9: Using the Virtual Microscope 'shear' feature.

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- Copy the link and include it to your question in your Google Form. The student can now follow the link to be directed to the point of view of the thin section to answer the assessment question *(fig 10)*.
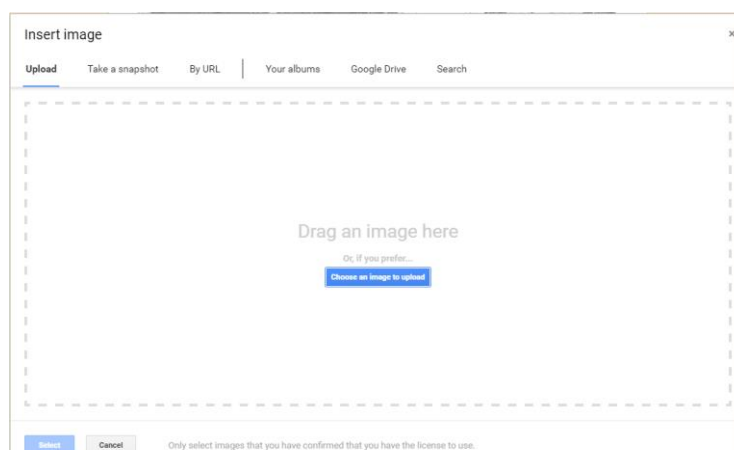


Figure 10: Including the share URL into your Google assessment

## Step 3.2 Including an image

Notice that on the question tool bar - located to the left of the document as you scroll up and down – is an 'add image option'. This option can be used if you wish to use an annotated image of a thin section and include it into your assessment. However, this will require you to manually annotate the images to highlight particular areas you wish the student to view. Moreover, this does not require the student to navigate to the VM webpage.

- Separately create and an annotated image you wish to include in the assessment.
- Using the assessment toolbar select the 'add image' option *(fig 11)*.
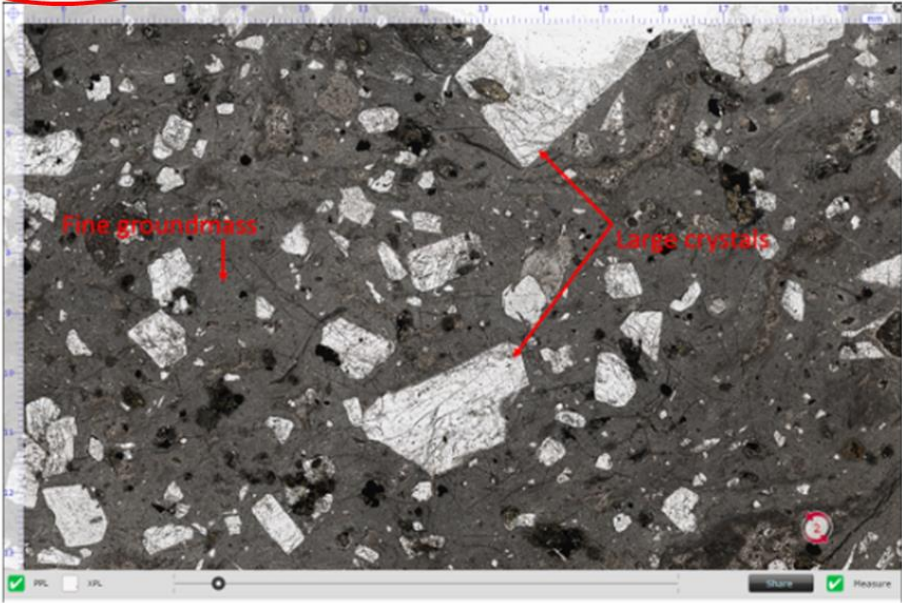


Figure 11: Inserting an image to your Google assessment.

- Chose an image to upload and click 'upload image' and give your image a title.
- You will now have an image embedded into your assessment without the student having to navigate away from the Google Form assessment.
- Below is an example of and included image *(fig 12)*.

Figure 12: Including and editing your image to your Google assessment

# Section 3 – Embedding your Google Form into Blackboard

Once your Google Form has been created you can now embed this document into blackboard. Ensure that the Google Form is complete, where the correct answer keys, correct answer type and correct point weighting have been selected. Remember to toggle the required button for compulsory questions. Embedding your Google Form into blackboard will allow your student to access and complete the assessment through blackboard.

## Step 1.3 Copying the HTLM

- Once the form is completed, on the top right hand corner of the screen you should see 'send'. Click on 'send' to display send options *(fig 13)*.



Figure 13: Copying the HTML

- There are three send options. 1) via email, 2) via URL and 3) via HTML. We will be "sending" via HTML *(fig 14)*.
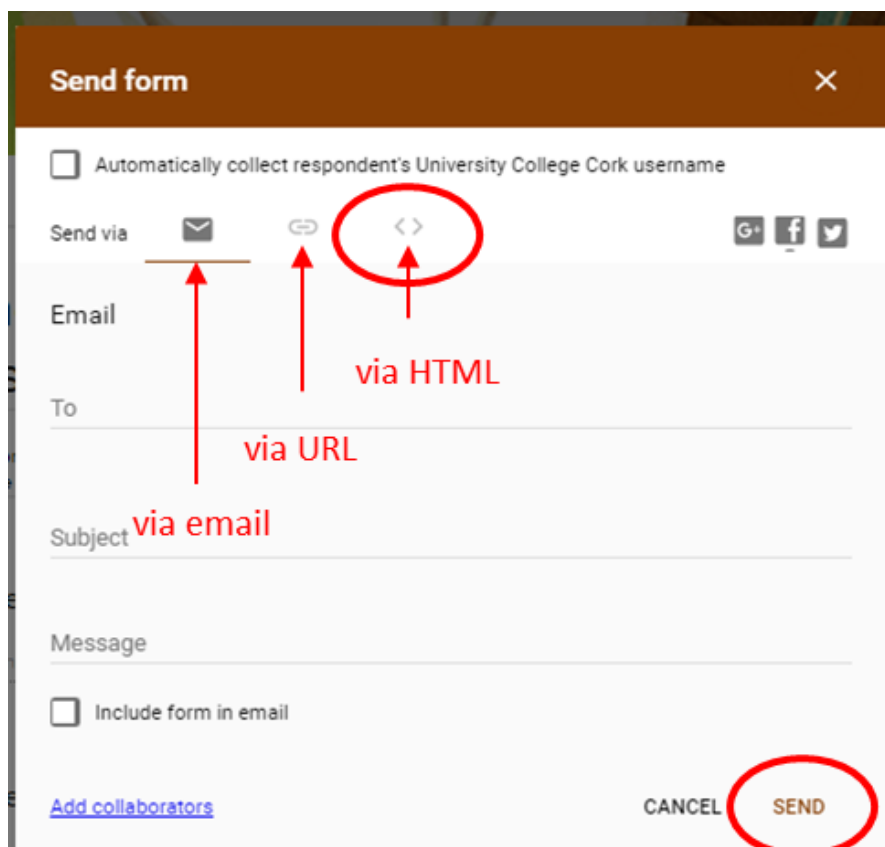


Figure 14: Copying the HTML

- Click on the HTML option to display the full HTML. On the bottom right hand corner click 'copy'. This will copy the HTML to later past into blackboard.

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## Step 2.3 Embedding into Blackboard

Once the HTML has been copied it can now place into Blackboard. The student can then access the Google Form directly through Blackboard.

- Open blackboard and go to the desired module.
- In 'course documents' click on the 'build content' dropdown menu *(fig 15)*.
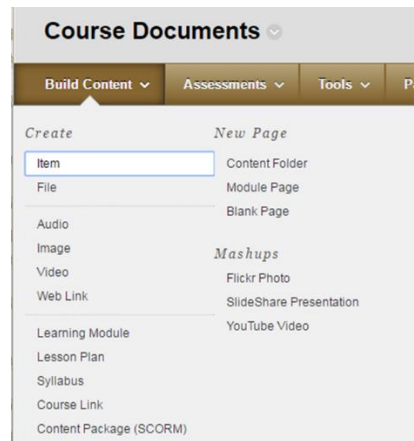- In the drop down menu, select 'item' and give a title to your item.



Figure 15: Copying the HLTM to blackboard

- In the right hand corner of the text window, select the dropdown toolbar for additional features to reveal the 'HTML' tool.
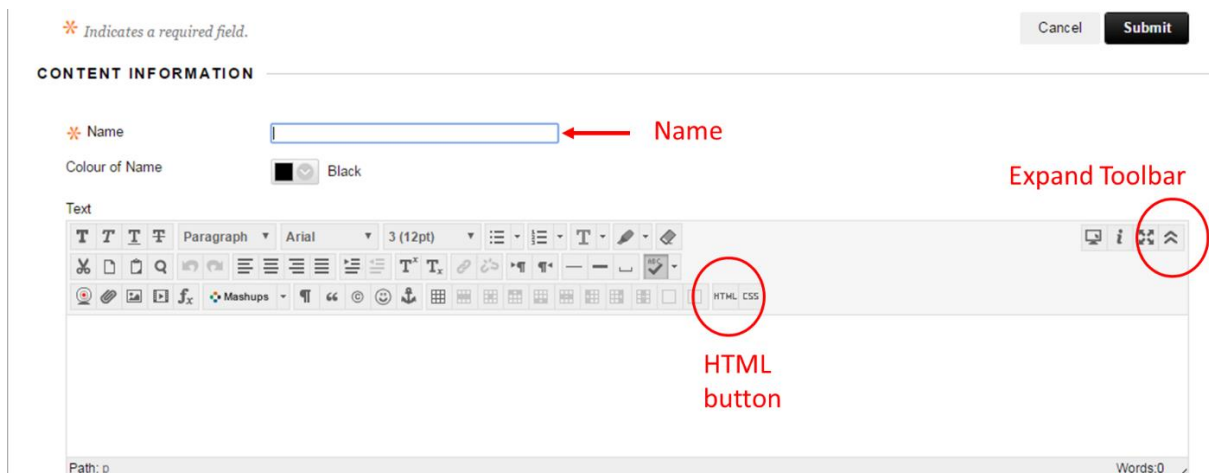


Figure 15: Copying the HLTM to blackboard

- Click the HTML button and paste the HTML into the 'HTML Code View' and then click update and submit *(fig 15 & 16)*.
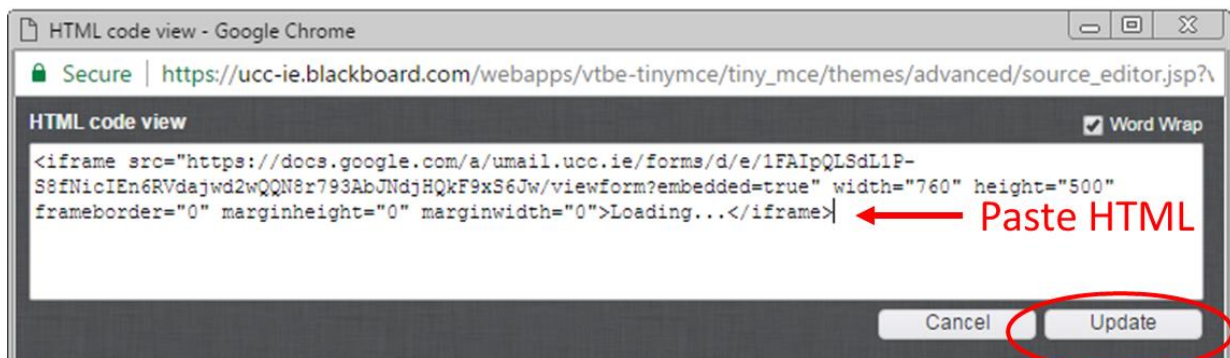


Figure 16: Copying the HLTM to blackboard

# Section 4 – Collecting results

Once your Google Form has been successfully embedded into blackboard and completed by your students you can now view results and generate a spreadsheet to view your assessment score board.

- At the top of your Google Form click the 'Responses' tab. Here you will find the responses completed by the students.
- At the right hand corner, you will see a green spreadsheet symbol. Click on this symbol to generate a results spreadsheet *(fig 17)*.
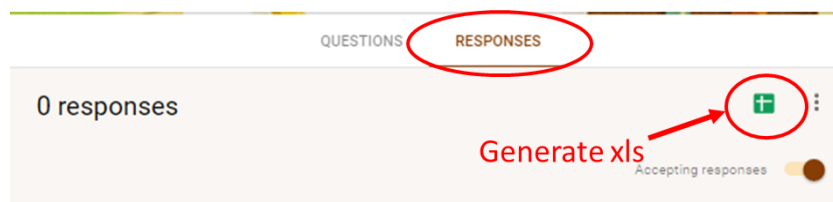


Figure 17: Collecting results and generating your spreadsheet

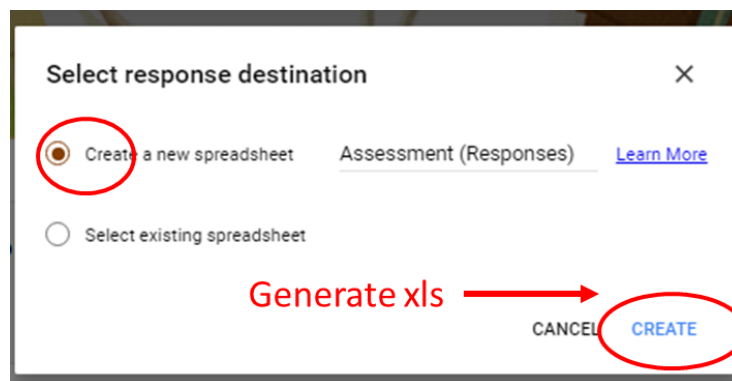- Click on 'Create a new spreadsheet' to create a new xls results document *(fig 18)*.



Figure 18: Collecting results and generating your spreadsheet