

## Using google forms for in-class polling

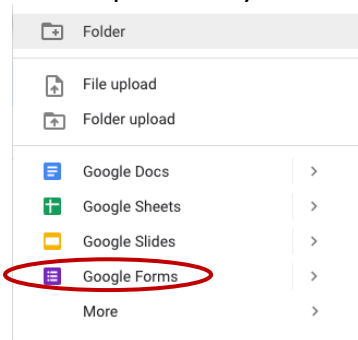
Google forms can be used to create an in-class multiple-choice poll that can be reused indefinitely or even for multiple classes. The approach described below will not provide a record of who answered questions or record their answers. It replaces the typical pauses in a lecture where I might stop to check for comprehension quickly. In an hour-long class, I typically have 2-3 polls.

### Setting up a polling form:

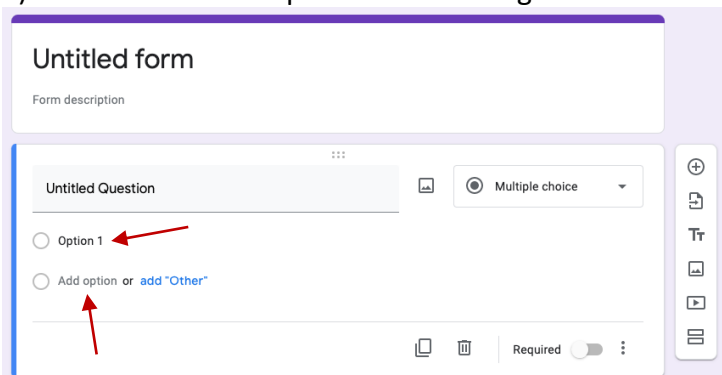
- 1) Go to google drive: [drive.google.com/](https://drive.google.com/)
- 2) Click the new icon in the upper left corner



- 3) Click the Google Forms option. This will create a blank google form with a single multiple choice question by default.

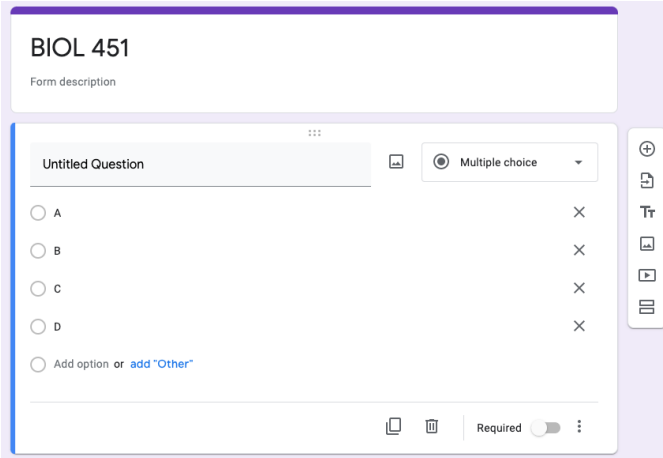


- 4) Click on the text "Option 1" and change to A



- 5) Click on the text "Add option" and type B. Repeat this until you have the number of options you plan on offering in your in-class polls.

6) The form will have a default name of "Untitled form" I usually change this to the course name. Your form should now look something like this:

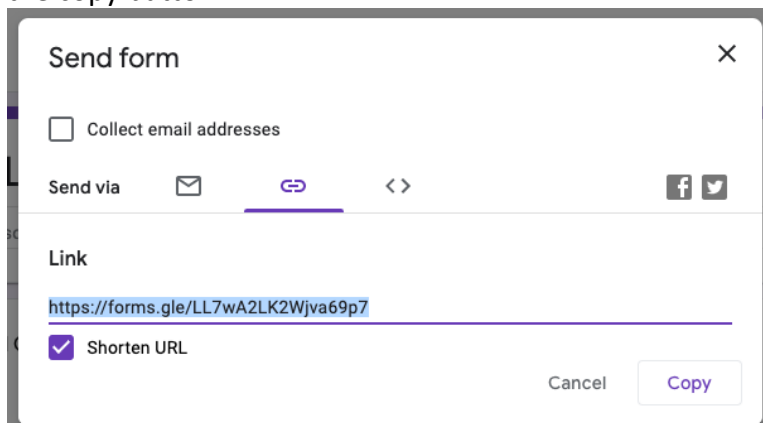


The screenshot shows a Google Forms editor interface. At the top, the form is titled "BIOL 451" with a subtitle "Form description". Below this, there is a question titled "Untitled Question" of type "Multiple choice". The question has four radio button options labeled A, B, C, and D. Below these options is a link to "Add option or add 'Other'". At the bottom of the question, there are icons for a link, a trash can, and a "Required" toggle switch. On the right side of the question, there is a vertical toolbar with icons for adding, deleting, and duplicating questions.

7) Click the send button in the upper right hand corner



8) In the popup window click the paperclip icon then check the shorten url box and then click the copy button.



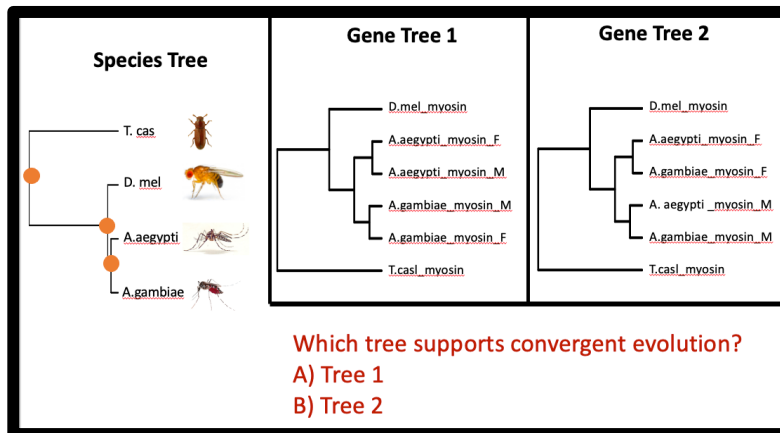
The screenshot shows a "Send form" popup window. At the top, there is a checkbox for "Collect email addresses". Below this, there is a "Send via" section with icons for email, a link (paperclip), and a code editor. To the right of these icons are social media icons for Facebook and Twitter. Underneath, there is a "Link" section with a text input field containing the URL "https://forms.gle/LL7wA2LK2Wjva69p7". Below the input field is a checkbox for "Shorten URL" which is checked. At the bottom right, there are "Cancel" and "Copy" buttons.

You can now include this link in your syllabus, zoom chat window, or emails to your students. Anytime you present a poll slide to your students, they can go to this link and vote.

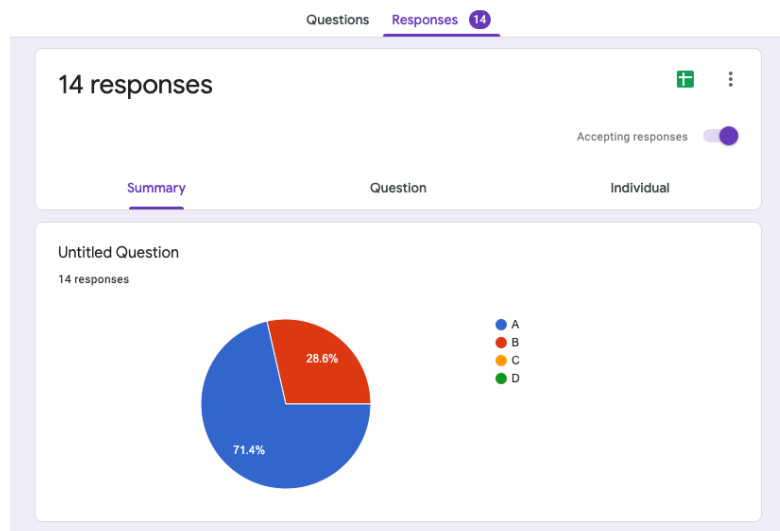
## Using the form in classes:

Before lecture starts, I go to my google drive and click on the poll that I have created. When it opens you will see that there are two tabs at the top (Questions and Responses). Click on the responses tab. If there are any responses from previous uses you can click on the three stacked circles on the upper right and then click on delete all responses.

I use the poll by going to a PowerPoint slide that contains a multiple-choice question for the students.



As students answer the questions the pie chart will update with their answers. I usually share this screen once most student have answered and then we discuss their answers and clear up any confusion.



Once we are ready to move on, I quickly click on the three dots in the upper right corner and delete all answers so the form is ready to be used again.