

## Setting up Google Form and Spreadsheet for KSA Voting May 2021

The purpose: This document will provide step-by-step directions to convert the KSA voting Excel spreadsheet into an online form that allows everyone in the room and online to vote virtually. This eliminates the need for time-consuming hand counts of the votes. This new online format still retains the familiar KSA voting format of 4, 3, 2, 1 (4 – Most Important, 1 – Least Important).

### Things you will need:

- A Google account
- A list of KSAs you gathered for your meeting
- A “clear” web browser with no open tabs, as this process will open several new browser tabs. Do not close any of the tabs created by Google as you will need to access them during this process.
- Familiarity with basic Excel functions, formulas, and formatting
- Time

### Categories covered:

- I. Creating the Google Form that will collect the votes from your BILT members
- II. Linking the Google Form to the Google Sheet
- III. Formatting the Voting and Tabulation Functions
- IV. Testing the Form

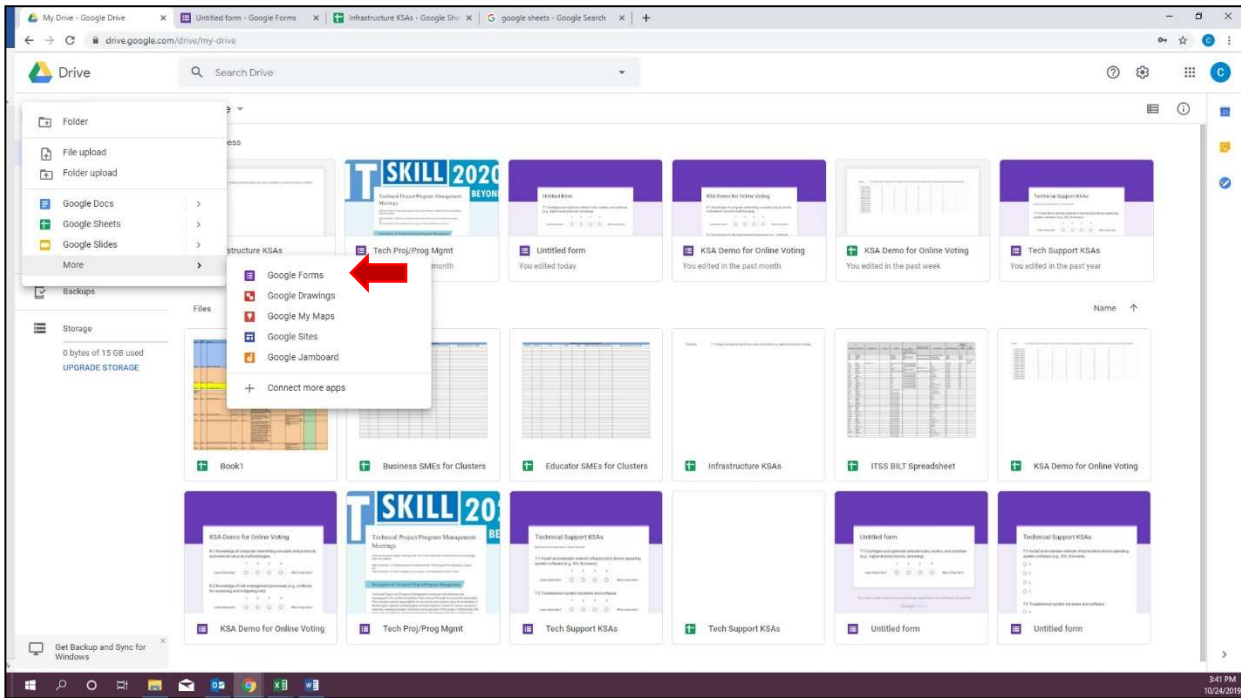
### **I. Creating the Google Form**

Go back to Google Drive; to do so, go up to the tabs in your web browser. Reminder: do not close any of the tabs that Google has opened during this process.

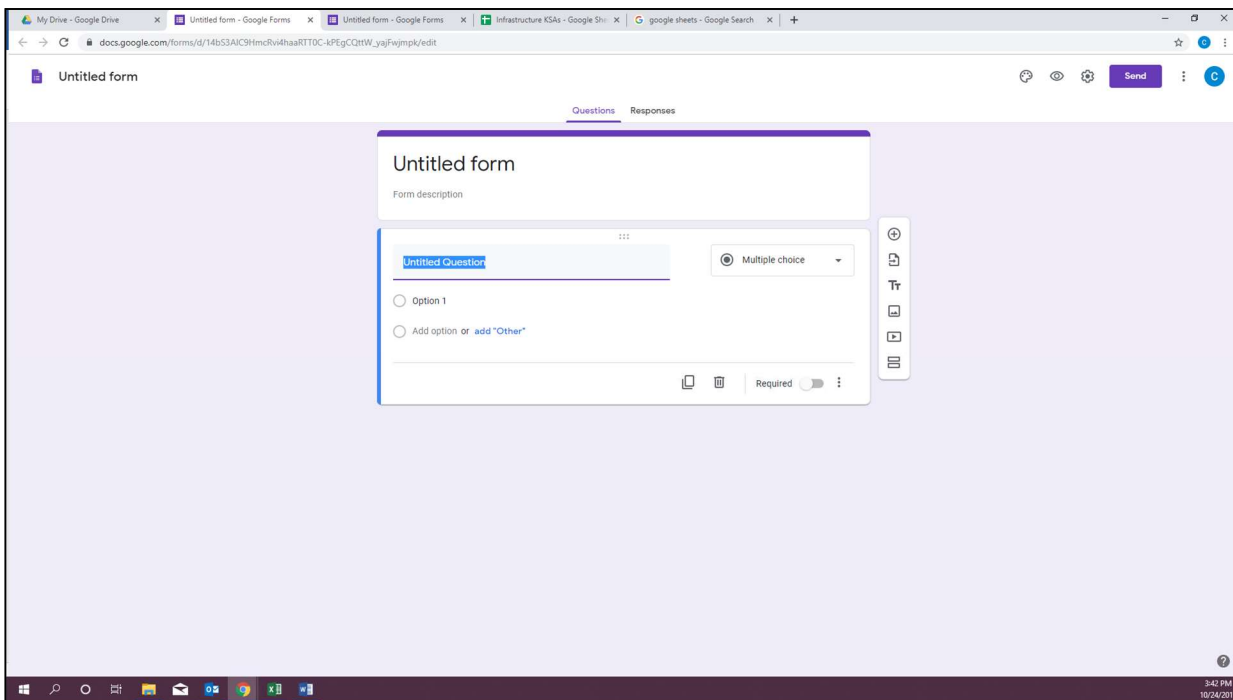
In your web browser click on the “My Drive – Google Drive” tab:

Once there, you will click on the “+New” button on the Google Drive page. Select “Google Forms” if you do not see it listed select “More” and then select “Google Forms.”





This is the “Untitled form” screen that will pop up:




Now you are ready to start building the form, question by question. Each KSA line item from your gathered list of KSAs will become its own question on this Google Form.

There are three essential pieces that must be included in the Google form for the voting to work properly.

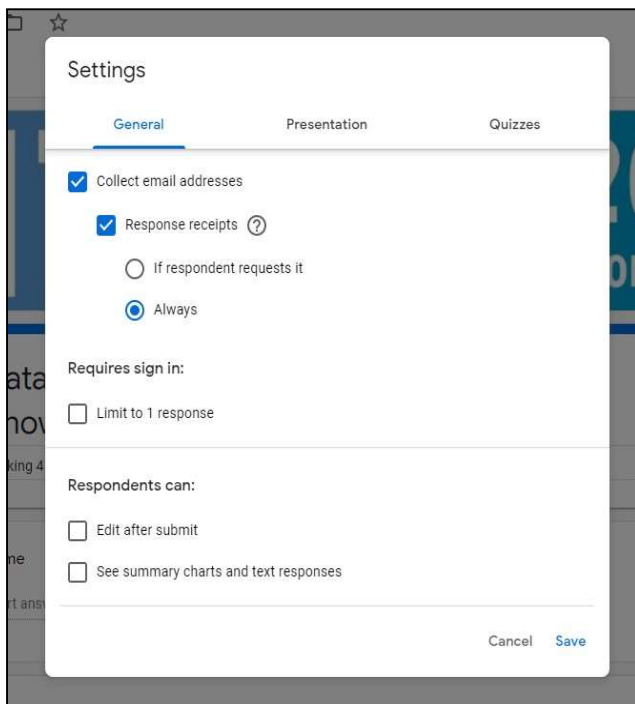
- Collect email address
- Name (should be first question)
- KSA item numbering

To direct Google to automatically send respondents a copy of their voting responses, follow these simple steps.


1. Go to the Google Form you will be using for voting.
2. Click on the settings button  at the top right of the screen.
3. The “Settings” menu will appear. Select the “General” tab.
4. In that menu, click the checkbox for “Collect email addresses.” This will allow you to select “Response receipts” and “Always.”

This setting change will **automatically e-mail your voters a copy of their voting responses**. Without this, BILT members may not remember their vote during the discussion.

Be sure to push the “Save” button to confirm these changes.



Now that you have directed Google to collect email addresses, you will click on the words “Untitled Form” at the top of the form and rename the form by typing in the name of your survey (for example, “Infrastructure KSAs”).

Now you are ready to start adding the second essential piece to your Google Form. There is a vertical toolbar with 6 icons on it. To add a question, you will click on the top icon in that list . This will add a question below your survey title. In the question box that pops up, you will see a drop-down menu open up on the top right of the question box. To collect the respondents name you will want to click the down arrow and select “short answer” as the question type. Now on the right side of the question box in the line that says question type “Name”.

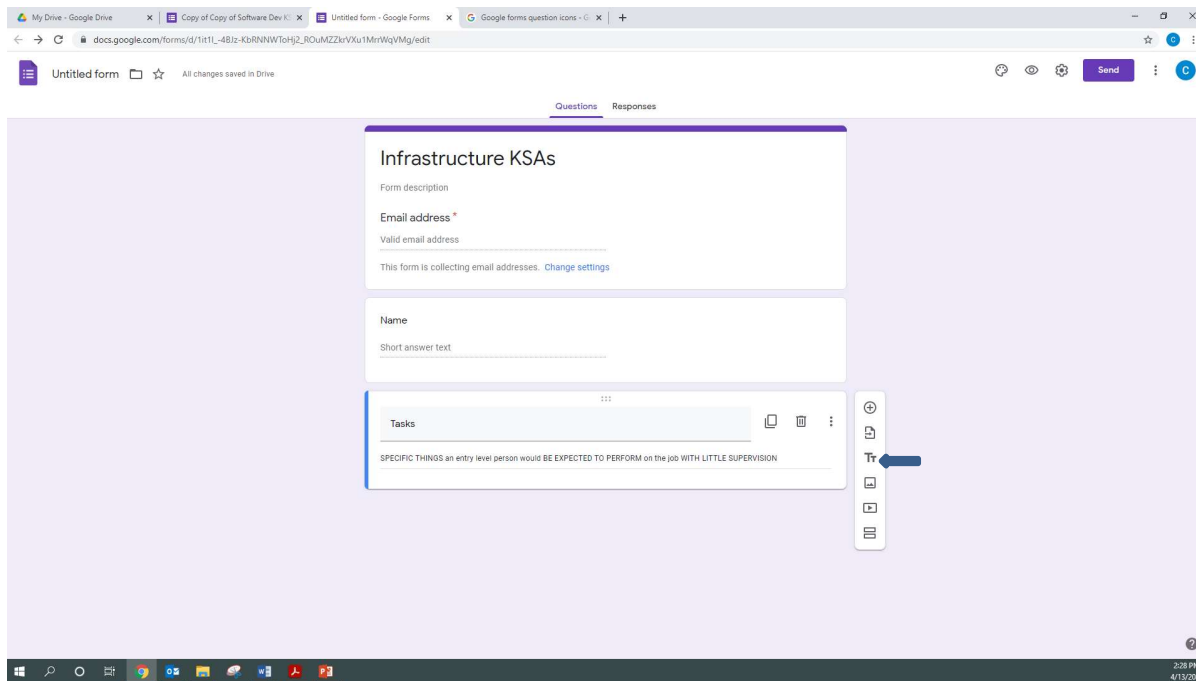
In this form, the only required information is an email address (which you set up in the previous step using the “Setting” menu). You do not want to require answers as the BILT member may not want to provide a response for every item in the Google Form.

Next, you will insert a section title. This is the third icon (double Ts) on the vertical toolbar next to your question (the blue arrow below shows which icon to click) in between your task, knowledge, skills and abilities sections. This will break up the form and help the respondent stay focused.


Along with the title you will also create a description to help define each of the four KSA sections.

- **Tasks** - Specific things an entry level person would be expected to perform on the job with little supervision.
- **Knowledge** - Focuses on the understanding of concepts. It is theoretical and not practical. An individual may have an understanding of a topic or tool or some textbook knowledge of it but have no experience applying it.
- **Skills** - The capabilities or proficiencies developed through training or hands-on experience. Skills are the practical application of theoretical knowledge. Someone can take a course on investing in financial futures, and therefore has knowledge of it. But getting experience in trading these instruments adds skills.
- **Abilities** - Often confused with skills, yet there is a subtle but important difference. Abilities are the innate traits or talents that a person brings to a task or situation. Many people can learn to negotiate competently by acquiring knowledge about it and practicing the skills it requires. A few are brilliant negotiators because they have the innate ability to persuade.

This is what your form should look like to this point. You have the survey title, the required email field, then an optional question for the respondent's name, and the first section heading with title and description.

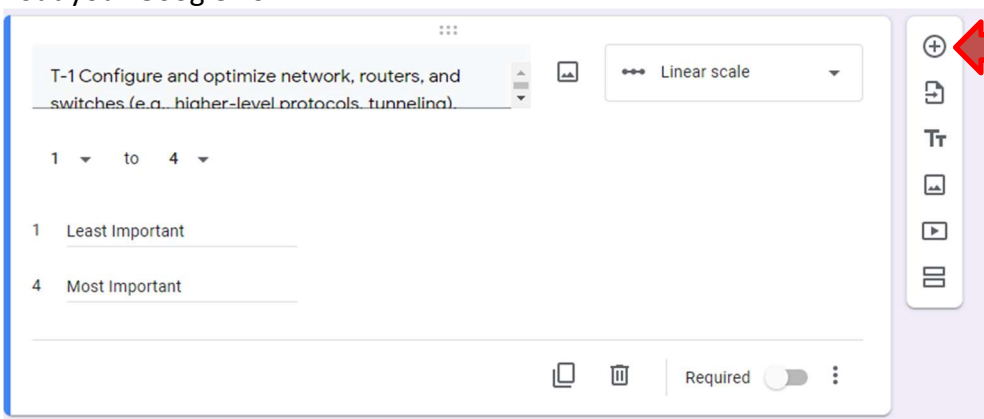


Now we can move to the questions.

Each question for your KSA items will look like the question in the image below. Click the  icon again to add a question. Choose “Linear scale” for your question type. As mentioned, your scale will use the standard KSA voting format: 1 – 4 (1 – Least Important, 4 – Most Important). You may need to adjust the scale with the pull-down menus so the question offers only four choices. It is also important that you annotate your items with letter and numbers, T-task (example T-1); K-knowledge (example K-1); S-Skill (example S-1); A-ability (example A-1). If you do not have this piece the voting formula will not work.

There is not a way to import the contents from your KSA list, unless you are pulling from a previously created survey. You will have to input each item on the list individually; you can either type them in or you can copy and paste it in from your collected list.

To add the next question simply click the plus-sign icon shown below by the red arrow to continue to build out your Google Form:



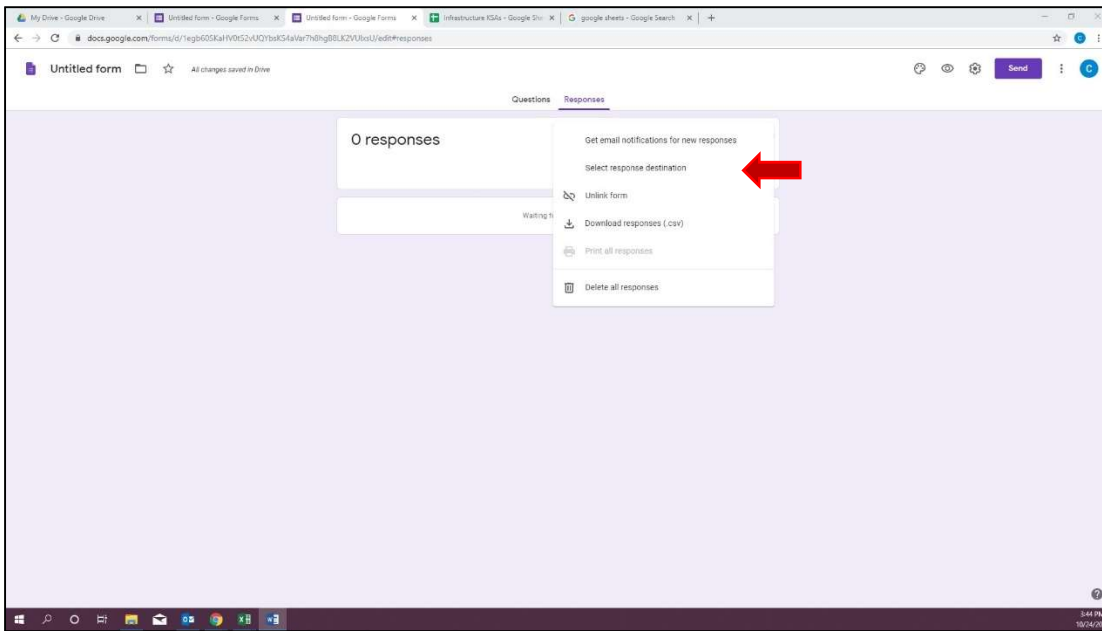
You can rename your form for easy finding in your Google Drive by clicking on “Untitled form” in top left corner of the tab. If you previously titled your survey, when you click on the “Untitled form” it will automatically update to the title you typed at the top of the form.

There are also ways to customize the form’s style, including changing the colors and adding a logo. To make those adjustments, click on the painter’s palette at the top right.

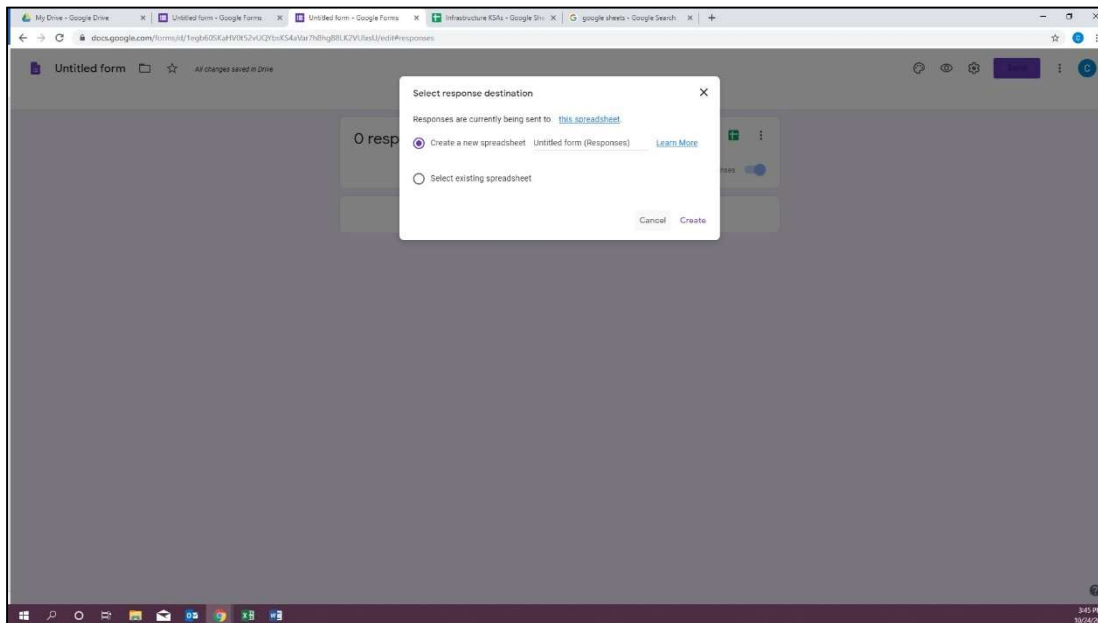
## II. Linking the Google Form to the Google Sheet

Now it’s time to connect the voting results of the Google Form to the Google spreadsheet created in Section 1.

Inside the Google Form page, click on the “Responses” tab in the Form menu header (it’s to the right of the “Questions” tab you’re working in now), then click on the three vertical dots. From there, click “Select response destination.”

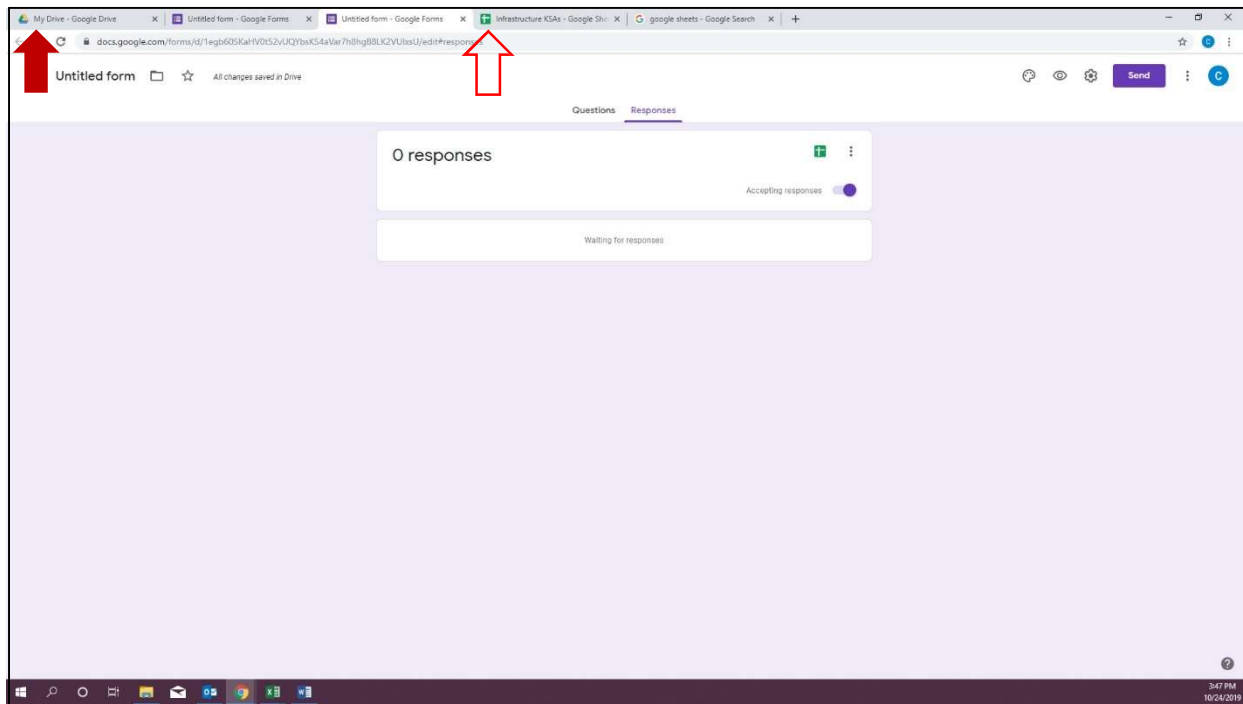


In the new “Select response destination” window click on “Select create a spreadsheet,” then click “Create.”

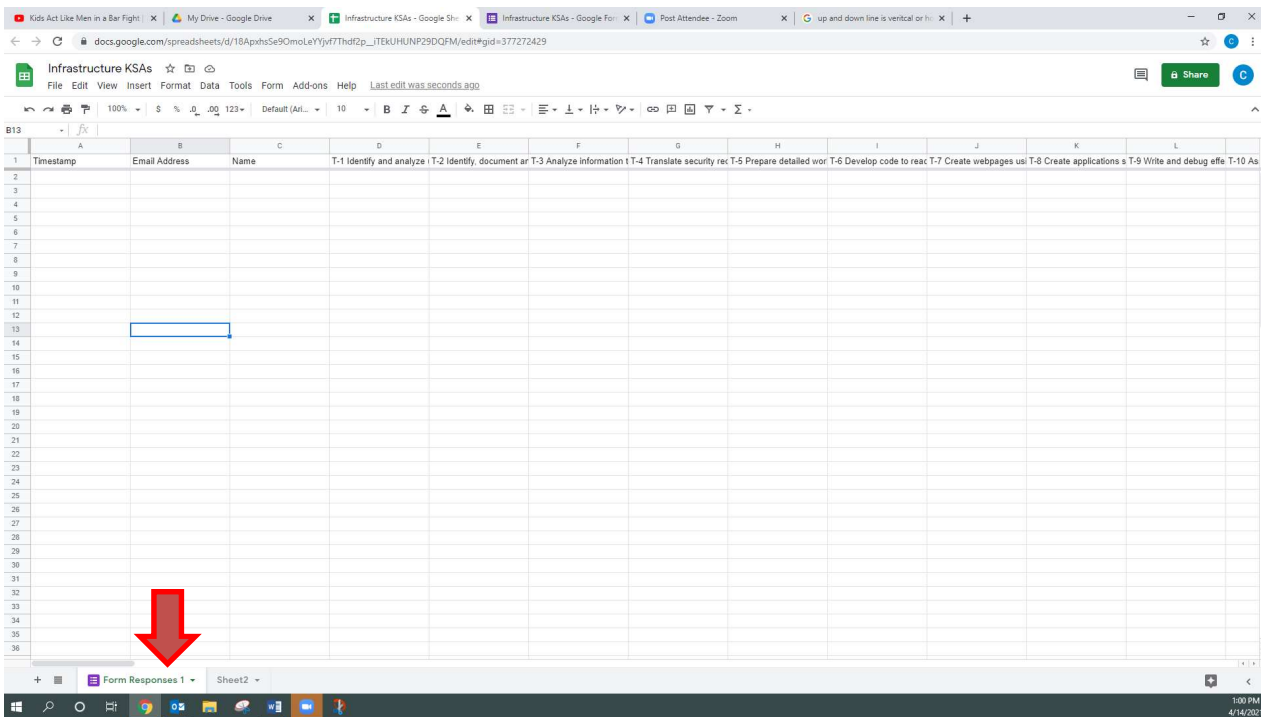


Messages will pop up in the bottom left corner letting you know that the form and the spreadsheet are linking.

Next, go back to “My Drive,” under files you will find a “Google Sheet” titled the same thing as your survey double click on it to open it.



Now you will notice there is a tab on your Google Sheet titled “Form Responses 1.”



Click on this new “Form Responses 1” tab (beside the “Sheet1” worksheet tab that created earlier) and you should see you questions from your Google Form across row 1.

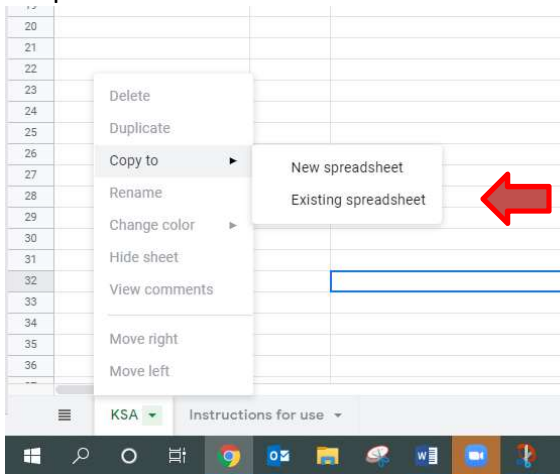
### III. Configuring the Vote Tabulation

To set up KSA sheet with the vote tally go to the Google Sheet “KSA Summary Template” at the link below. There are two tabs in that Google Sheet. “KSA” is the template you will copy. The other “Instructions for use” tab provides additional directions for how to use the template.

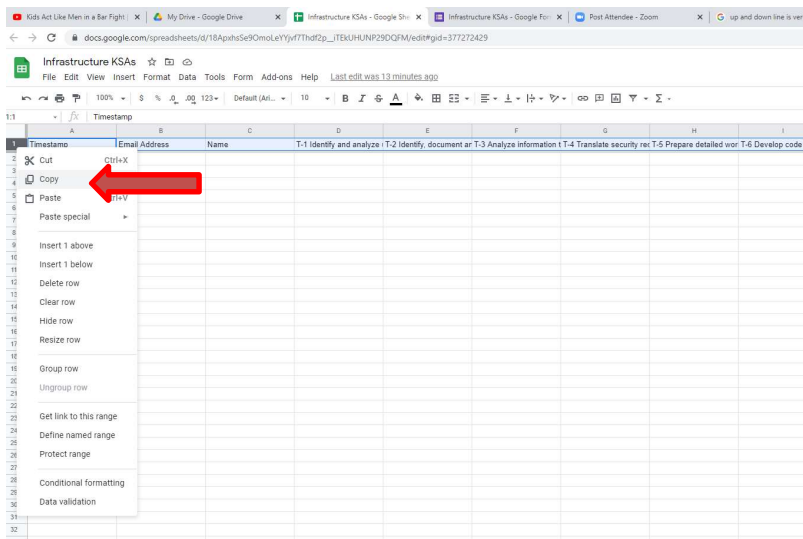
[https://docs.google.com/spreadsheets/d/1v7CoXaG7HmfnWcl\\_6H5RiRhHKGoMu6mhcPnlewXgzYE/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1v7CoXaG7HmfnWcl_6H5RiRhHKGoMu6mhcPnlewXgzYE/edit?usp=sharing)

Here are the six steps to follow:

1. Using the link above, open this “KSA Summary Template” Google Sheet. This will open as a new tab in your browser. Make sure that you click on the tab labeled “KSA.” Right-click the “KSA” sheet tab, select “Copy to” and “Existing spreadsheet,” then select the Google Sheet file created in Section 1 and click select. Then click on the Google Sheet browser tab and note the added "Copy of KSA" tab next to your “Form Responses 1” tab.

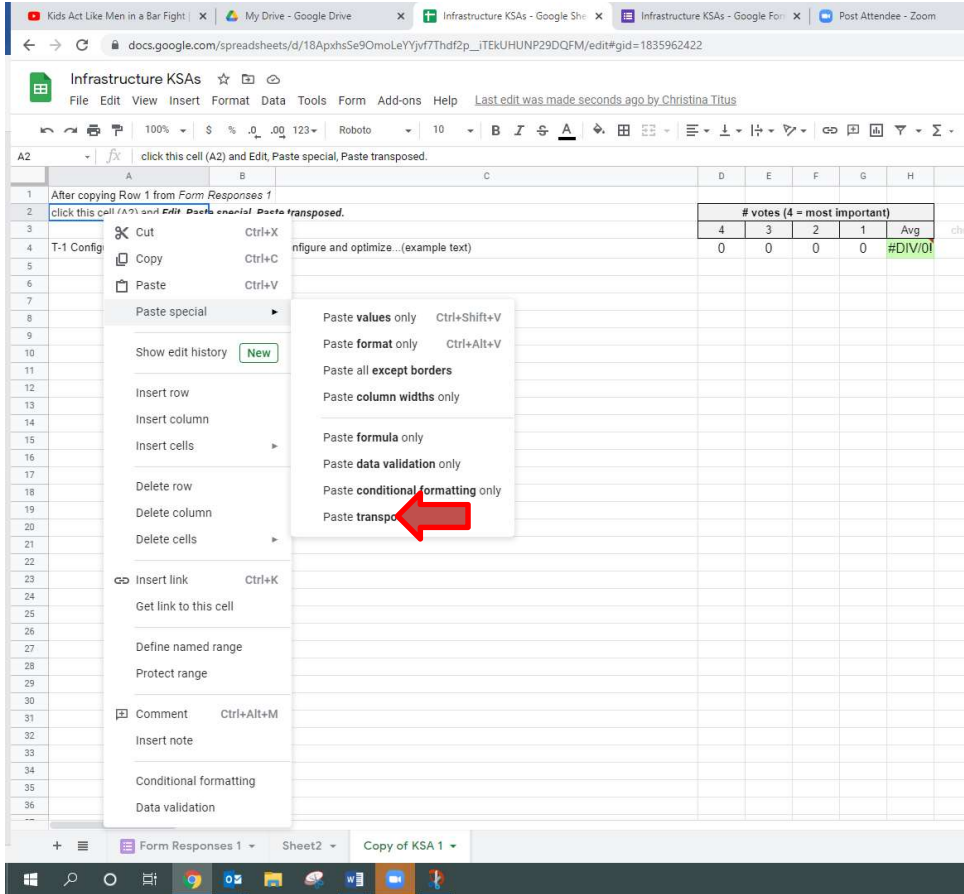


2. In the “Form Responses 1” tab of your Google Sheet (which in our example we’re calling “Infrastructure KSAs”), select all of row 1 by clicking on the number 1. The entire row should be highlighted. Right click on the highlighted row 1 and select Copy.

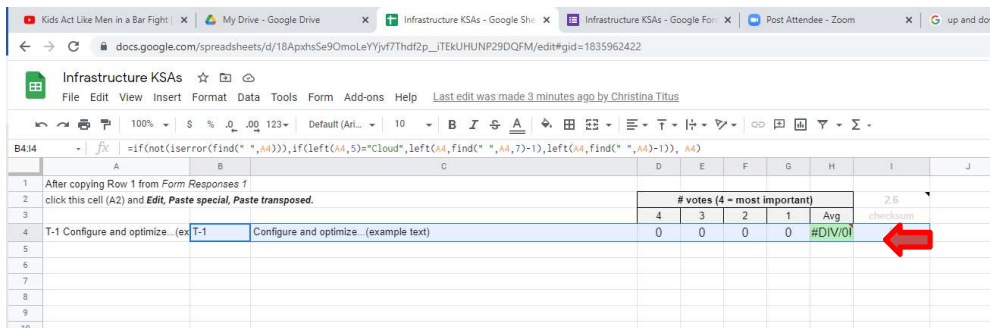




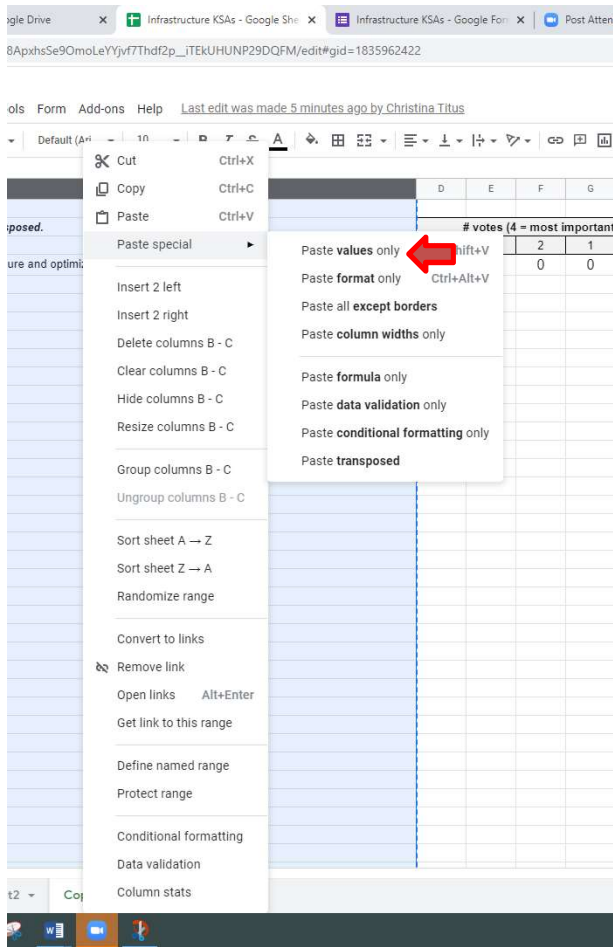
- In the Copy of KSA tab, select cell A1, right click to open up a menu. Select “Paste special” and then select “Paste transposed.”



- Select cells B4 thru I4, double click the tiny blue square in the lower right corner of the selected cells (this tiny square will automatically replicate the formula all the way down to the last row).

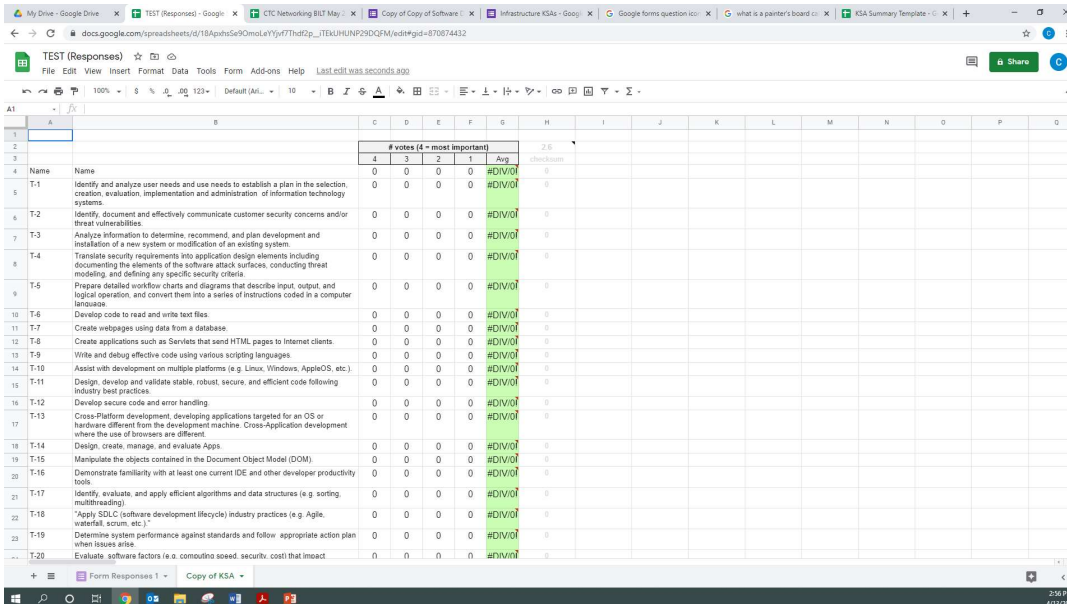


- Select columns B & C, right click on the selected columns and select “Copy.” Then you will right click again in the highlighted selected columns, select “Paste special” then select “Paste values only.”



6. Remove column A by selecting all of column A right click on the highlighted column, right click and select delete column.

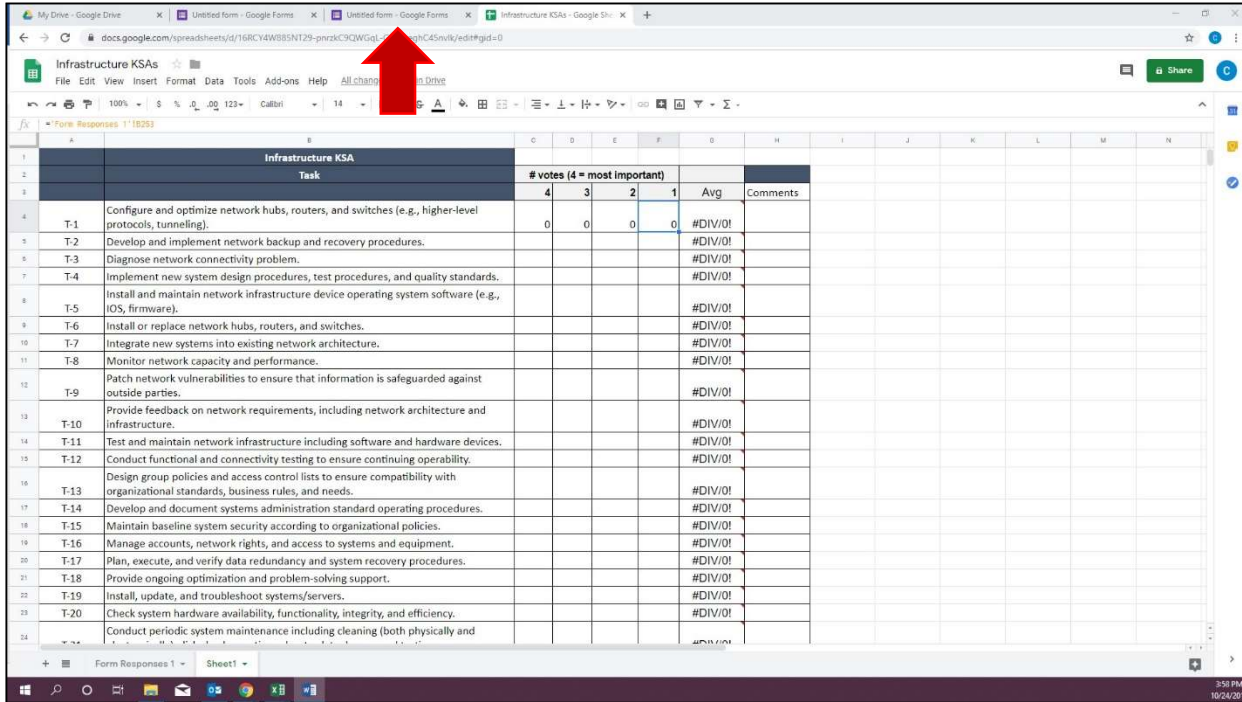
When you are finished it should look like the screenshot below.



## IV. Testing the Form

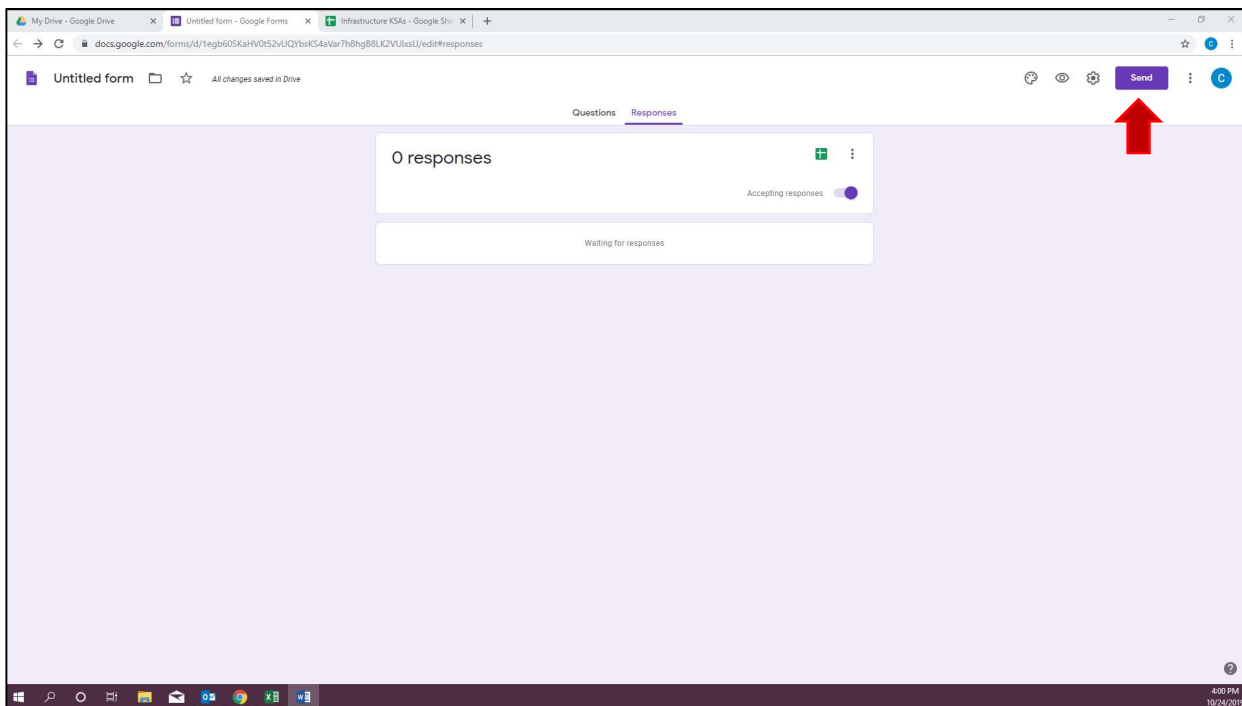
Now you are ready to have someone test the Google form. **Thorough testing is strongly encouraged before you use the Google voting system with your BILT.**

Go up to the tabs in your web browser and click on Google Form:

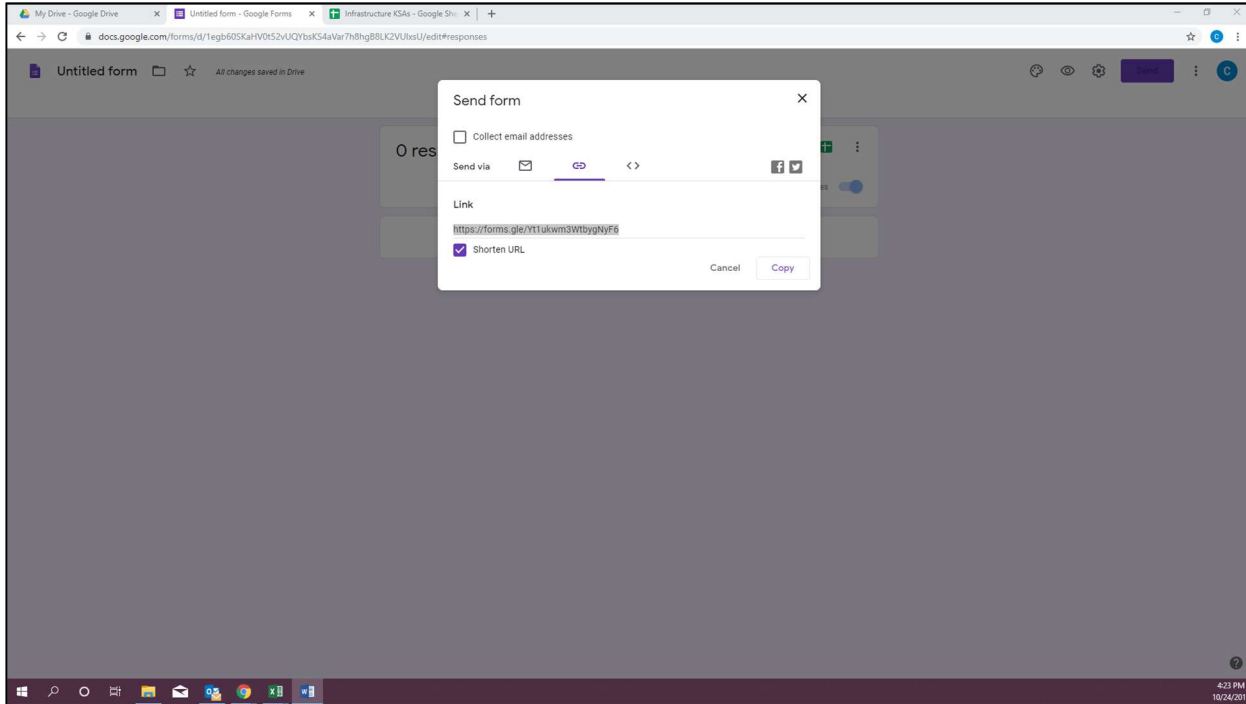


Infrastructure KSA		# votes (4 = most important)				Avg	Comments
Task		4	3	2	1		
T-1	Configure and optimize network hubs, routers, and switches (e.g., higher-level protocols, tunneling).	0	0	0	0	#DIV/0!	
T-2	Develop and implement network backup and recovery procedures.					#DIV/0!	
T-3	Diagnose network connectivity problem.					#DIV/0!	
T-4	Implement new system design procedures, test procedures, and quality standards.					#DIV/0!	
T-5	Install and maintain network infrastructure device operating system software (e.g., IOS, firmware).					#DIV/0!	
T-6	Install or replace network hubs, routers, and switches.					#DIV/0!	
T-7	Integrate new systems into existing network architecture.					#DIV/0!	
T-8	Monitor network capacity and performance.					#DIV/0!	
T-9	Patch network vulnerabilities to ensure that information is safeguarded against outside parties.					#DIV/0!	
T-10	Provide feedback on network requirements, including network architecture and infrastructure.					#DIV/0!	
T-11	Test and maintain network infrastructure including software and hardware devices.					#DIV/0!	
T-12	Conduct functional and connectivity testing to ensure continuing operability.					#DIV/0!	
T-13	Design group policies and access control lists to ensure compatibility with organizational standards, business rules, and needs.					#DIV/0!	
T-14	Develop and document systems administration standard operating procedures.					#DIV/0!	
T-15	Maintain baseline system security according to organizational policies.					#DIV/0!	
T-16	Manage accounts, network rights, and access to systems and equipment.					#DIV/0!	
T-17	Plan, execute, and verify data redundancy and system recovery procedures.					#DIV/0!	
T-18	Provide ongoing optimization and problem-solving support.					#DIV/0!	
T-19	Install, update, and troubleshoot systems/servers.					#DIV/0!	
T-20	Check system hardware availability, functionality, integrity, and efficiency.					#DIV/0!	
	Conduct periodic system maintenance including cleaning (both physically and					#DIV/0!	

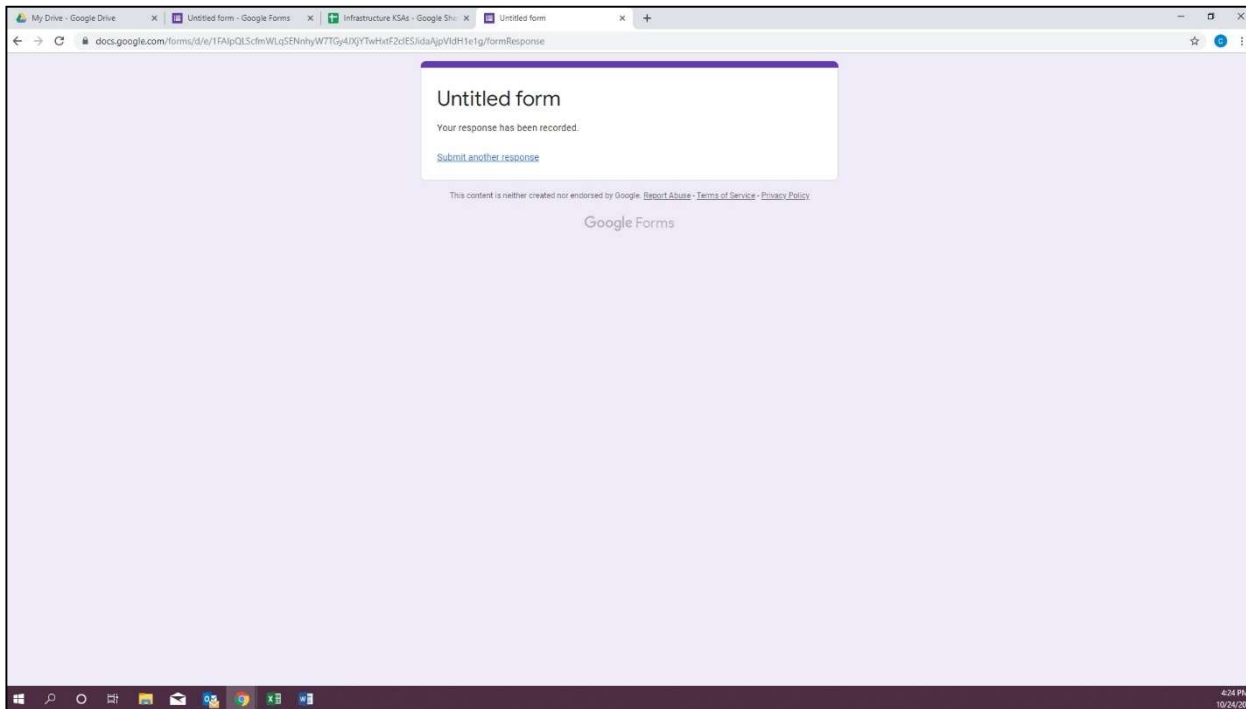
Click on the purple send button at the top right of the screen:



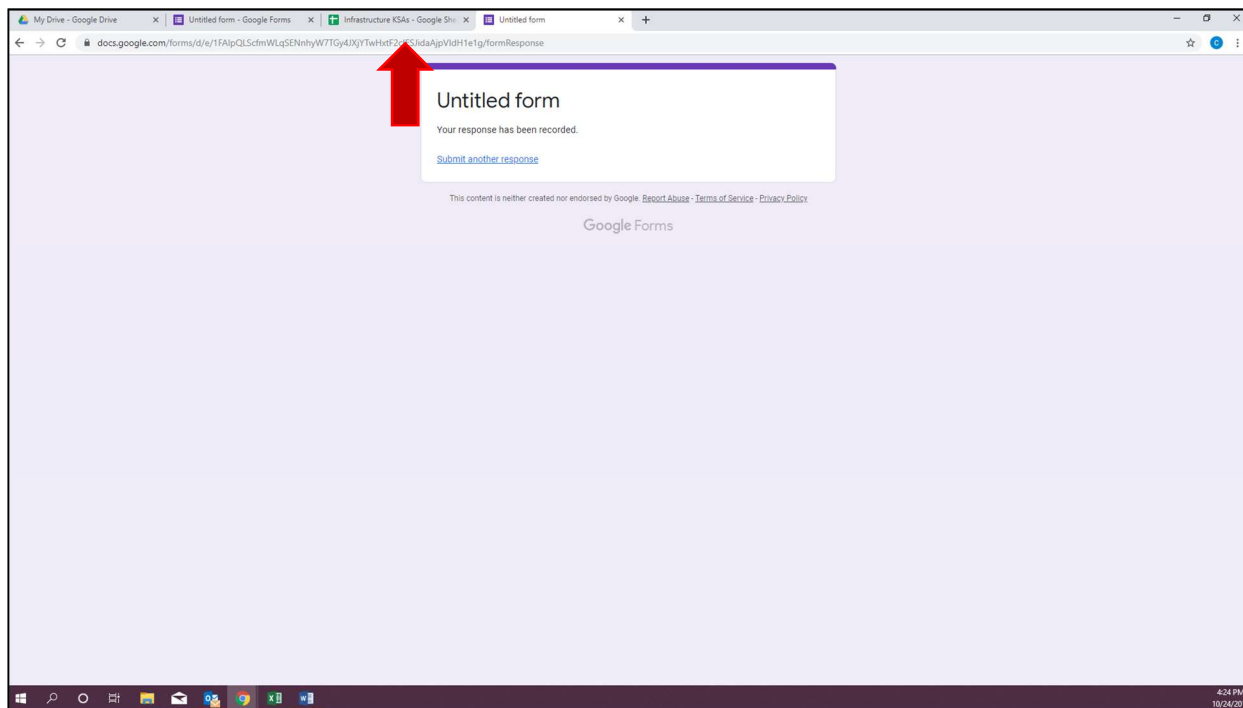
Click on the weblink icon (it looks like a chain). That will create a shareable link to this form (notice that under that link is a box you can click to shorten the URL).



Send that form link URL to someone else and ask them to use it in a new browser and complete the Google Form:



Now go back to “Infrastructure KSAs” Google Sheet:



If done correctly you should see the test votes show up in your form:

	Name	# votes (4 = most important)				Avg
		4	3	2	1	
4	Name	0	0	0	0	#DIV/0!
5	T-1 Identify and analyze user needs and use needs to establish a plan in the selection, creation, evaluation, implementation and administration of information technology systems.	1	0	1	0	3.00
6	T-2 Identify, document and effectively communicate customer security concerns and/or threat vulnerabilities.	1	0	1	0	3.00
7	T-3 Analyze information to determine, recommend, and plan development and installation of a new system or modification of an existing system.	0	1	0	1	2.00
8	T-4 Translate security requirements into application design elements including documenting the elements of the software attack surfaces, conducting threat modeling, and defining any specific security criteria.	0	1	0	1	2.00
9	T-5 Prepare detailed workflow charts and diagrams that describe input, output, and logical operation, and convert them into a series of instructions coded in a computer language.	0	0	0	0	#DIV/0!
10	T-6 Develop code to read and write text files.	0	0	0	0	#DIV/0!
11	T-7 Create webpages using data from a database.	0	0	0	0	#DIV/0!
12	T-8 Create applications such as Servlets that send HTML pages to Internet clients.	0	0	0	0	#DIV/0!
13	T-9 Write and debug effective code using various scripting languages.	0	0	0	0	#DIV/0!
14	T-10 Assist with development on multiple platforms (e.g. Linux, Windows, AppleOS, etc.).	0	0	0	0	#DIV/0!
15	T-11 Design, develop and validate stable, robust, secure, and efficient code following industry best practices.	0	0	0	0	#DIV/0!
16	T-12 Develop secure code and error handling.	0	0	0	0	#DIV/0!
17	T-13 Cross-Platform development, developing applications targeted for an OS or hardware different from the development machine. Cross-Application development where the use of browsers are different.	0	0	0	0	#DIV/0!
18	T-14 Design, create, manage, and evaluate Apps.	0	0	0	0	#DIV/0!
19	T-15 Manipulate the objects contained in the Document Object Model (DOM).	0	0	0	0	#DIV/0!
20	T-16 Demonstrate familiarity with at least one current IDE and other developer productivity tools.	0	0	0	0	#DIV/0!
21	T-17 Identify, evaluate, and apply efficient algorithms and data structures (e.g. sorting, multithreading).	0	0	0	0	#DIV/0!
22	T-18 "Apply SDLC (software development lifecycle) industry practices (e.g. Agile, waterfall, scrum, etc.)."	0	0	0	0	#DIV/0!
23	T-19 Determine system performance against standards and follow appropriate action plan when issues arise.	0	0	0	0	#DIV/0!
...	T-20 Evaluate software factors (e.o. computing speed, security, cost) that impact	0	0	0	0	#DIV/0!

If that is reflecting correctly, then congratulations - you have finished!

BUT... if the numbers don't look right, go back and ensure you followed the six steps in Section 3 for using the template.


## VI. Additional elements

### Bolding

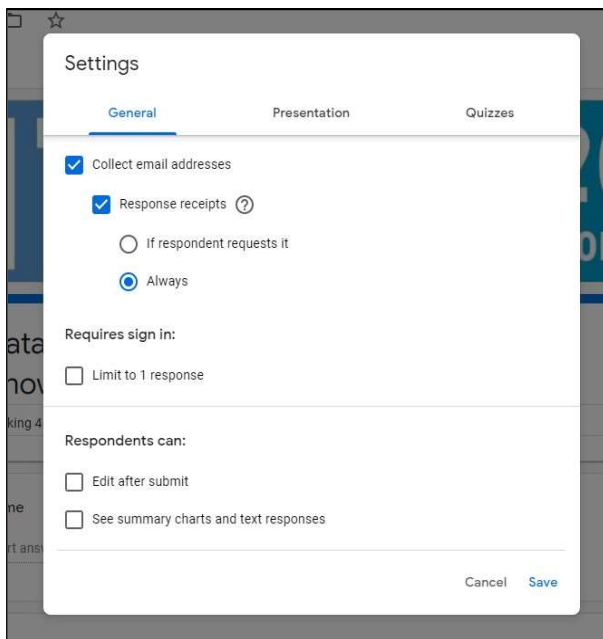
If you need to bold words in Google forms you must use this Bold Text Generator <https://lingoiam.com/BoldTextGenerator>. It's an easy tool to use. Type the "normal text" word in the box on the left, which will generate different versions of that word on the right. Pick the one you like best, copy it (via mouse right-click or control+C), then paste it directly into the Google Form.

### Re-voting

To enable re-voting follow these simple steps.

1. Go to the Google Form you will be using for voting.
2. Click on the settings button  at the top right of the screen.
3. The "Settings" menu will appear. Select the "General" tab.
4. Farther down that same "Settings" window there is a "Respondents can" section. Check the "Edit after submit" box. This will **allow your voters to change their vote**. The automatic email they receive with their votes will include a link which they can use to re-open the form and cast a new vote. They need only recast the vote(s) they want to change. Any "blank" choices will remain unchanged – that is, their first votes will remain as is. Respondents can re-vote as many times as they'd like.

Be sure to push the "Save" button to confirm these changes.



Please note: Google Sheets does not keep a record the employer's original votes – new votes overwrite the original vote. In other words, while the Google Sheet will include a notation to let you know that a vote has been changed, you will not be able to see the original vote.

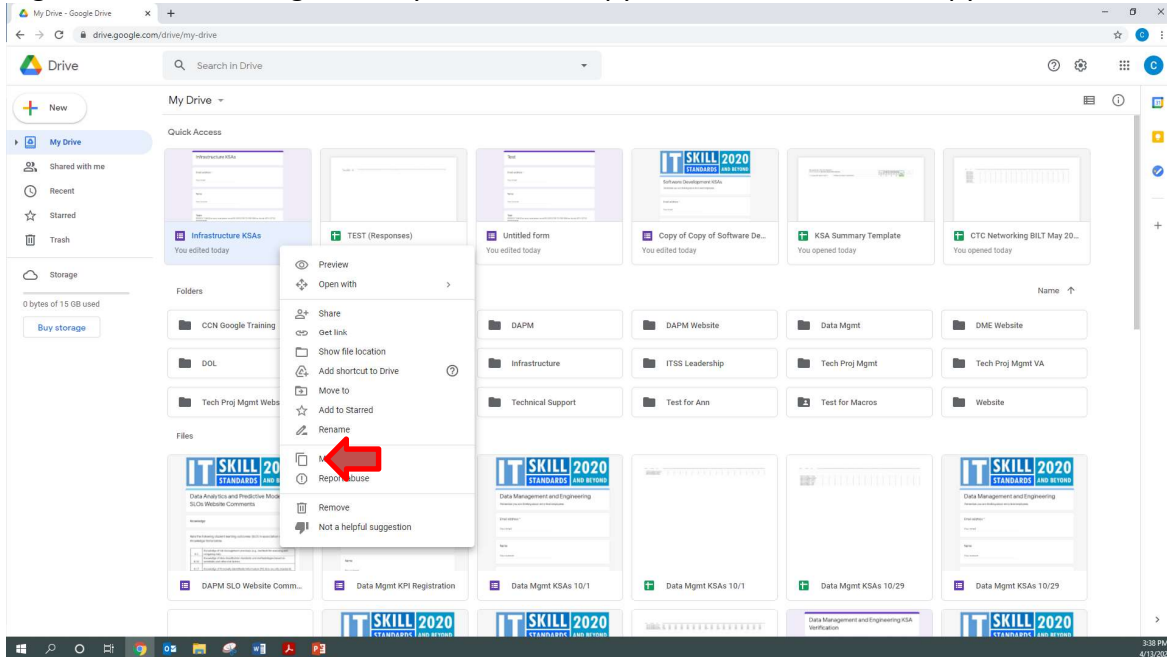
If you want to compare original votes to the changed votes, you'll need to save a copy of the results before re-votes.

**\*\* NOTE:** If you do not make this “Edit after submit” settings change, do not use the Google form for a re-vote. Instead, conduct the re-vote in the room with hand-counting and make a manual adjustment of the KSA spreadsheet. Until that “Edit after submit” choice is selected, the Google Sheet will record every vote – that is, if a BILT member votes twice, both votes will be recorded and affect your average.

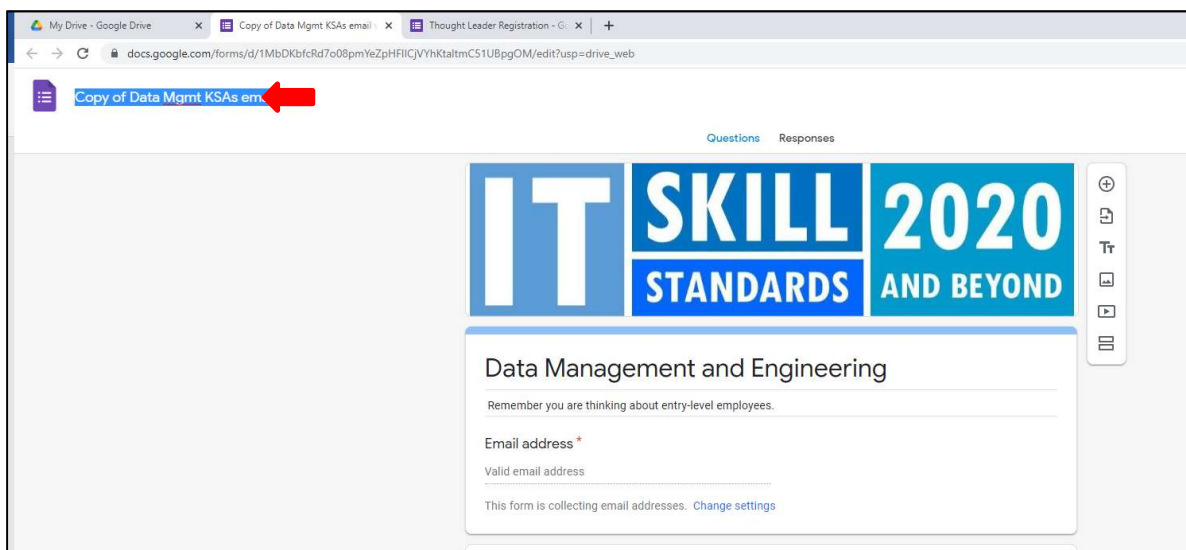
## Amending an Existing Google Sheet and Google Form

The best way to amend a Google Sheet and Google Form is to copy the existing Google Form. If you copy the Google Sheet linked to the Google Form, it will copy both and link them but it is hard to make modifications. For this reason, it’s better to copy the Google Form.

1. Right click on the Google Form you want to copy, then select “Make a copy” from the menu.



2. Open the new “Copy of the Google Form” via the new tab at the top of your browser. Rename the Google Form in the upper left field to avoid accidentally changing your original (see screenshot below).



3. Modify the “Google Form” based on your needs. Once all modifications are completed link responses to a Google Sheet as described in Step 2 above.
4. Now follow the directions from Sections 3 and 4 above.



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