

# USING GOOGLE FORMS TO CREATE ASSESSMENTS AS AND FOR LEARNING

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## TECHNOLOGY FOCUS

In this Classroom Catalyst, you will be learning how to utilize Google Forms to create helpful assessment forms that can be used in any Junior, Intermediate and Senior Science classroom. Students will also be able to use these assessment forms to self-regulate their learning, set academic goals and monitor their own academic progress.

## DESCRIPTION OF CATALYST

Google Suite has a variety of tools and options that allow educators to make easy online assessments and track student progress. Two different assessments will be demonstrated using Google Forms; student self-assessment checklists and exit tickets/quizzes. These may be preferable to paper assessments due to the ability to save, store and quantitatively analyze and compare student responses with the click of a button! Google Forms can also export data to Google Sheets and graphically display the information for easier comparison of student responses.

## LEVEL

To utilize this technology, a basic to intermediate level of technical knowledge is required. A Gmail account and a Google profile is required.

## AUDIENCE

Junior, Intermediate and Senior Science teachers can use this resource and it is applicable to ALL disciplines of Science and Technology.

## TOOL HIGHLIGHTS

This catalyst will highlight the use of Google forms, specifically how to use the different templates within the Google forms domain.

Google Forms has many useful templates (<https://docs.google.com/forms/u/0/>) that can be adapted to create informative assessments FOR and AS learning. Student data can also be exported to Google Sheets for graphing and analysis. I will be demonstrating how I have utilized Google Forms in several courses to create formative assessments, and how these assessments can be used to provide informative feedback on student progress.

According to the Ontario Growing Success document (2010), (<http://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf>)

Assessment is the process of gathering information that accurately reflects how well a student is achieving the curriculum expectations in a subject or course. The primary purpose of assessment is to improve student learning. (Growing Success, 2010, p. 28).

Two main types of assessment will be highlighted and are described below.

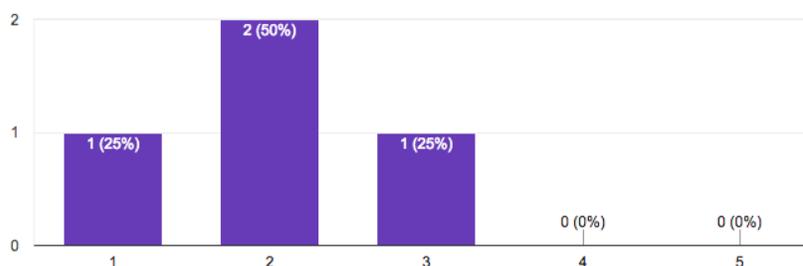
## GOOGLE FORMS FOR ASSESSMENT AS LEARNING

This type of assessment allows students to monitor and self-regulate their progress in a course and ultimately determine whether or not they are meeting the success criteria. Assessment as learning should occur frequently and in an ongoing manner. I will be demonstrating how to create an assessment as learning by using Google forms to design a student self-assessment checklist. This would typically be shared before a formal evaluation to help students gauge their readiness for an upcoming test, and can help inform them on how they (and the teacher) could scaffold their review.

The major benefit of using Google Forms to create this assessment as learning lies in the fact that Google Forms automatically saves, tabulates, summarizes and graphs all the responses collected from students. As a teacher, this saves an immense amount of time and energy. For example, in a self-assessment checklist given to a small Grade 10 class, students rated their their comfort level with labelling the different parts of a chromosome. The data was automatically summarized and is shown below:

### I can identify the different parts of a chromosome

4 responses



This information is useful in that it not only highlights areas students may need further review, but it also alerts the teacher to concepts s/he might need to reinforce in class to support student learning.

Please click on the video link on the right to learn how to access Google Forms.

Please click on the video link on the right to learn how to use Google Forms to create a self-assessment checklist.

## GOOGLE FORMS FOR ASSESSMENT FOR LEARNING

This type of assessment can be diagnostic or formative. It can help guide teachers in scaffolding and differentiating future lessons in order to support student learning. Exit tickets are great examples of assessment FOR learning. Normally administered at the end of a lesson, they are a quick diagnostic check on student concept attainment of a new topic.

The major benefit of using Google forms to create an exit ticket is that it automatically saves, summarizes, analyzes and graphs the data collected. Again, this saves time and energy in determining students' level of concept attainment and can guide the teacher's next steps. An example of a simple Google Form exit ticket used in the SCH4U Grade 12 Academic Chemistry course is shown below on the left:

### Exit Ticket

Before you leave class today, answer the following questions.

\* Required

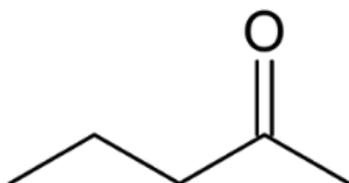
Name \*

Your answer

What's one important thing you learned in class today?

Your answer

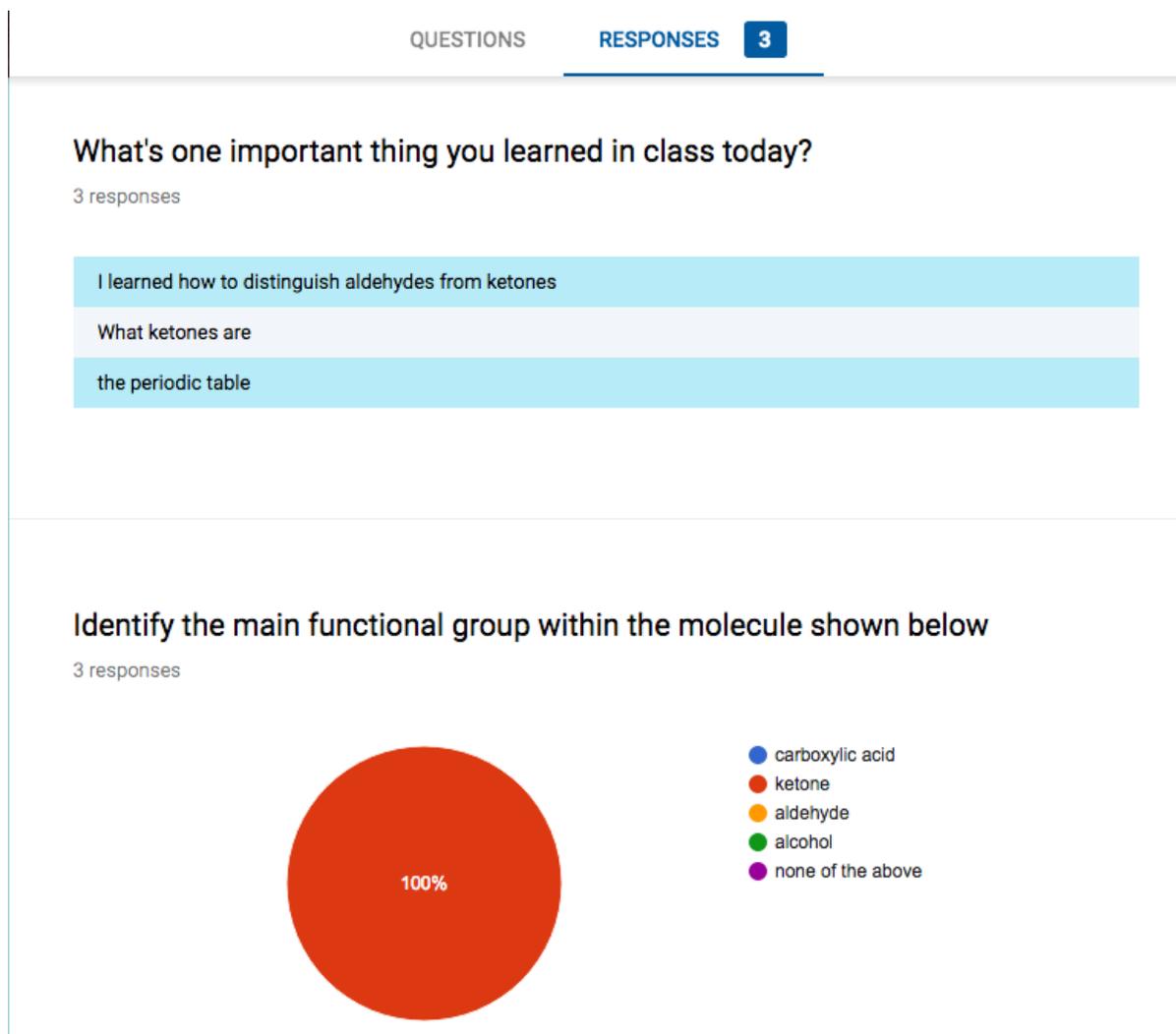
Identify the main functional group within the molecule shown below \*



- carboxylic acid
- ketone
- aldehyde
- alcohol
- none of the above

This shows a simple exit ticket for the SCH4U Organic Chemistry unit. The multiple choice question at the end allows the teacher to determine the % of students who are able to correctly identify a ketone.

Student responses were automatically put into a pie chart, indicating the % of students who were able to identify the correct functional group within a hydrocarbon.



This pie chart indicates that 100% of students were able to identify what a ketone is given a line diagram. This graph was automatically generated by Google Forms.

Please click on the video link on the right to learn how to use Google Forms to create an exit ticket.

For quizzes, Google Forms automatically summarizes and highlights the questions that were most problematic for students, making it easier for the teacher to identify which concepts to review.

### ASSESSMENT STRATEGY:

ALL forms of assessment are possible using Google forms. However the examples provided in this Classroom Catalyst are an assessment AS learning for the SNC10 Biology unit and an assessment FOR learning for the SCH4U Organic Chemistry unit.

## NEXT STEPS/EXTENSIONS/ACCOMMODATIONS/OTHER TOPICS FOR THIS TECH TOOL:

Google forms can be used to create a variety of applications. Here (<http://ditchthattextbook.com/2016/09/08/20-practical-ways-to-use-google-forms-in-class-school/>) is a great website that demonstrates many other ways to use Google Forms such as surveys, sign up sheets and rubrics that can be adapted to suit ANY classroom. It is a great way to collect data on a group of people, whether it is checking for concept attainment or collecting information on student profiles and preferences. Responses are automatically tabulated and analyzed and the Google Sheets option is an invaluable tool that allows you to download student data for further analysis. Google Support ([https://support.google.com/docs?hl=en&p=about\\_forms#topic=1360904](https://support.google.com/docs?hl=en&p=about_forms#topic=1360904)) also offers much help in using Forms effectively.

	A	B	C	D	E	F	G	H	I	J
1	Timestamp	Score	The movement of digestion products, electrolytes, vitamins, and water across the GI tract epithelium and into the underlying blood and lymphatic vessels is called	The main functions of the digestive system are	All of the following are organs of the digestive system except the	Which selection includes only accessory digestive organs?	Which term describes the wave of muscular contraction that moves material through the GI tract toward the anus?	Digestive functions of the tongue include	Which digestive organ mechanically and chemically transforms a food bolus into chyme?	
2	4/5/2017 11:08:15	11 / 15	absorption	all of the above	spleen	gallbladder, liver, pancreas, salivary glands	haustral churning	all of the above	stomach	
3	4/5/2017 11:11:13	15 / 15	absorption	all of the above	spleen	gallbladder, liver, pancreas, salivary glands	peristalsis	all of the above	stomach	
4	4/5/2017 12:38:50	14 / 15	absorption	all of the above	spleen	gallbladder, liver, pancreas, salivary glands	peristalsis	all of the above	stomach	
5	4/5/2017 12:40:20	15 / 15	absorption	all of the above	spleen	gallbladder, liver, pancreas, salivary glands	peristalsis	all of the above	stomach	
6	4/5/2017 13:13:01	13 / 15	absorption	absorption and elimination	spleen	gallbladder, liver, pancreas, salivary glands	peristalsis	all of the above	stomach	

With the click of a button, Google forms can export data into Google Sheets, where further analysis of student responses can be made.

With the effective use of Google Forms, one may never need to give paper assessments ever again!

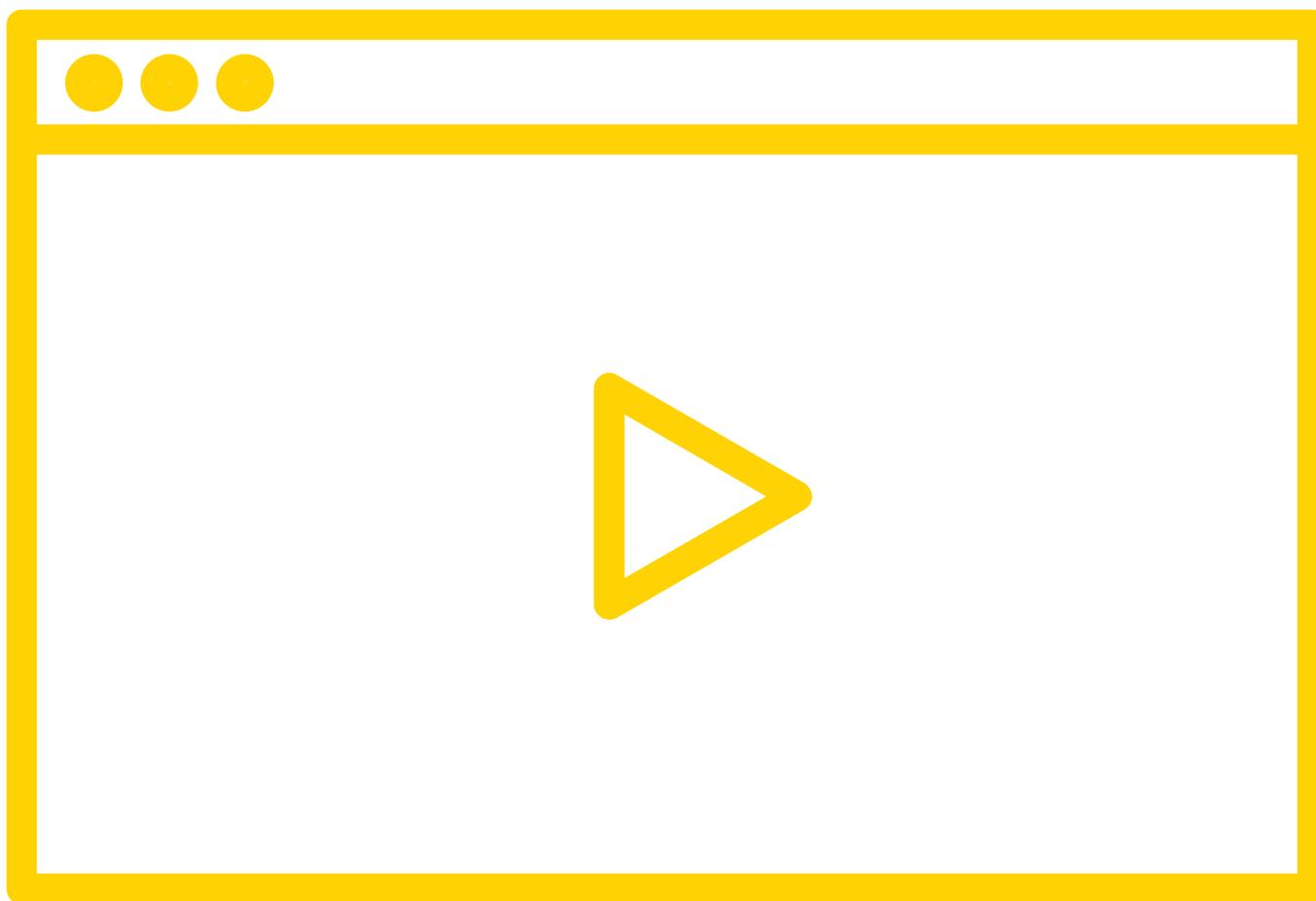
## ADDITIONAL RESOURCES:

- Ontario (2010). Growing success: Assessment, evaluation and reporting in Ontario's schools : covering grades 1 to 12. Toronto: Ministry of Education
- Ontario. (2008). The Ontario curriculum, grades 9 and 10 Science. Toronto: Ministry of Education.
- Ontario (2008). The Ontario curriculum, grades 11 and 12 Science. Toronto; Ministry of Education.
- Miller, Matt. (2016, September 8). 20 practical ways to use Google Forms in class, school. Retrieved from: <http://ditchthattextbook.com/2016/09/08/20-practical-ways-to-use-google-forms-in-class-school/> (<http://ditchthattextbook.com/2016/09/08/20-practical-ways-to-use-google-forms-in-class-school/>)



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**WATCH THE VIDEO**

05:59 min

(//www.youtube.com/embed/k1qFdJ94NV8?width=800&height=450&iframe=true)

## RESOURCES

- ▶ How to Access Google Forms (<https://www.youtube.com/watch>)
- ▶ How to Create an Assessment AS Learning (<https://www.youtube.com/watch>)
- ▶ How to Create an Assessment FOR Learning (<https://www.youtube.com/watch>)

## ELEMENT

- 🔗 Technology Enabled Learning (</expert-elements/technology-enabled-learning>)



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