



Virtual Cookies: Free Virtual Resources to Increase Participation, Discussion & Collaboration

Kristy Litster & Christina Watts

Mathematics Education and Leadership

Emma Eccles Jones College of Education and Human Services



Plickers

Cookie Rating:



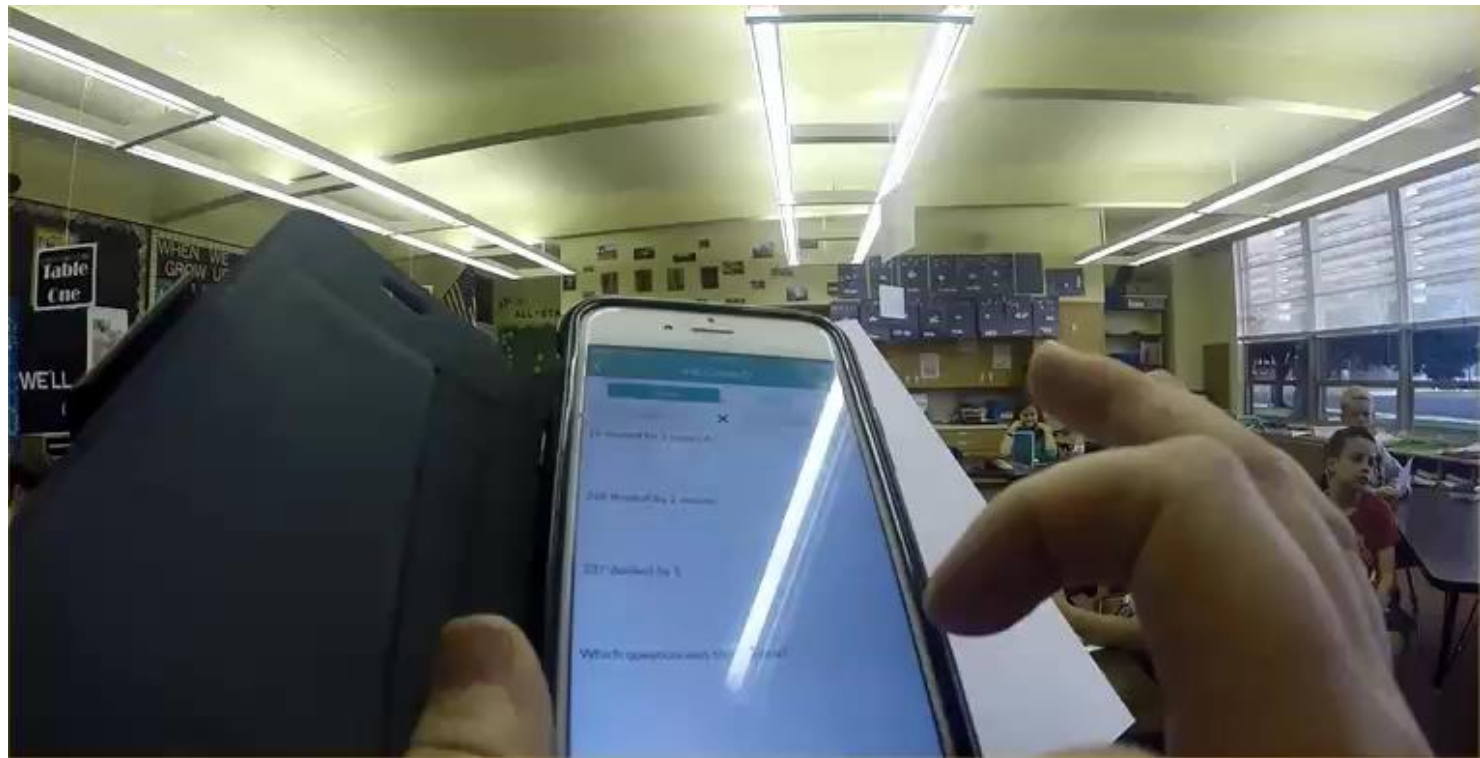
A live poll where the only device you need is yours. Students hold up a card, the app scans and records the results instantly to your device. You can also display results for the class. Cards can be printed from website.

<http://plickers.com>



☒ Participation ☒ Discussion ☐ Collaboration

Video of 1st Time Use (By Teacher and Students)



Using Picklers: Let's try It!

The screenshot shows the NCTM app interface. At the top, there's a teal header with a back arrow, the text 'NCTM', and a search icon. Below the header, there are two tabs: 'Queue' (active) and 'History'. Under the 'Queue' tab, there are buttons for 'Create' (with a close icon) and 'Library'. The main content area contains several questions with text input fields:

- Where do you teach?
- Is this your first time at NCTM?
- Did you eat Breakfast?
- I am excited about finding new ways to use technology in my classroom.
- What are your favorite colors?

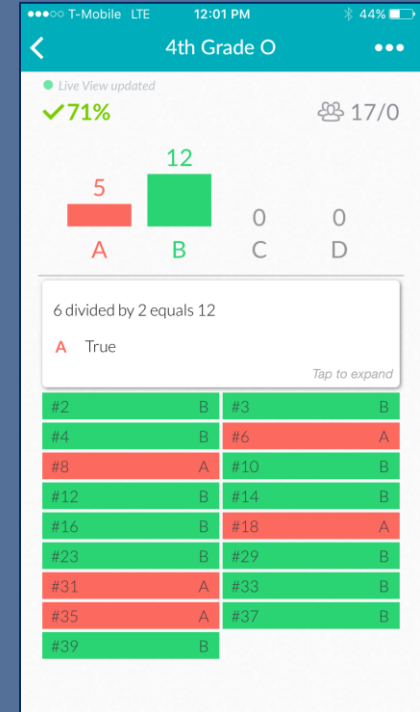
Select Question on App

The screenshot shows the NCTM app interface with a poll question. At the top, there's a teal header with a back arrow, the text 'NCTM', and a menu icon. Below the header, there's a green status bar that says 'Live View updated'. The main content area contains a question: 'Have you ever used picklers before?'. Below the question are four multiple-choice options:

- A Yes, with Students
- B Yes, as a Student
- C Yes both as a student and with students
- D No

At the bottom of the screen, there is a teal button with a camera icon and the text 'Scan'.

Scan the Room



Review Results



Cookie Rating:



Socrative has several features such as live quizzes, polls, exit tickets, and races.

Students and teachers can see live results. Questions can be multiple choice, true/false or short answer. Short answer responses must be exact in quizzes.

<https://socrative.com/>

Quick Question

FINISH

Are you ready to play?

START VOTE

SHOW NAMES

3 answers



Oh yeah!

REMOVE

Yes!

REMOVE

Oui!

REMOVE

☒ Participation ☐ Discussion ☐ Collaboration



Let's Try One!
b.socrative.com/login/student/
Room: A2UQVGSO

Space Race

Blue	
Magenta	
Lime	
Peach	
Violet	
Teal	
Indigo	
Orange	
Red	
Silver	



START A QUIZ



QUICK QUESTION



SPACE RACE



EXIT TICKET

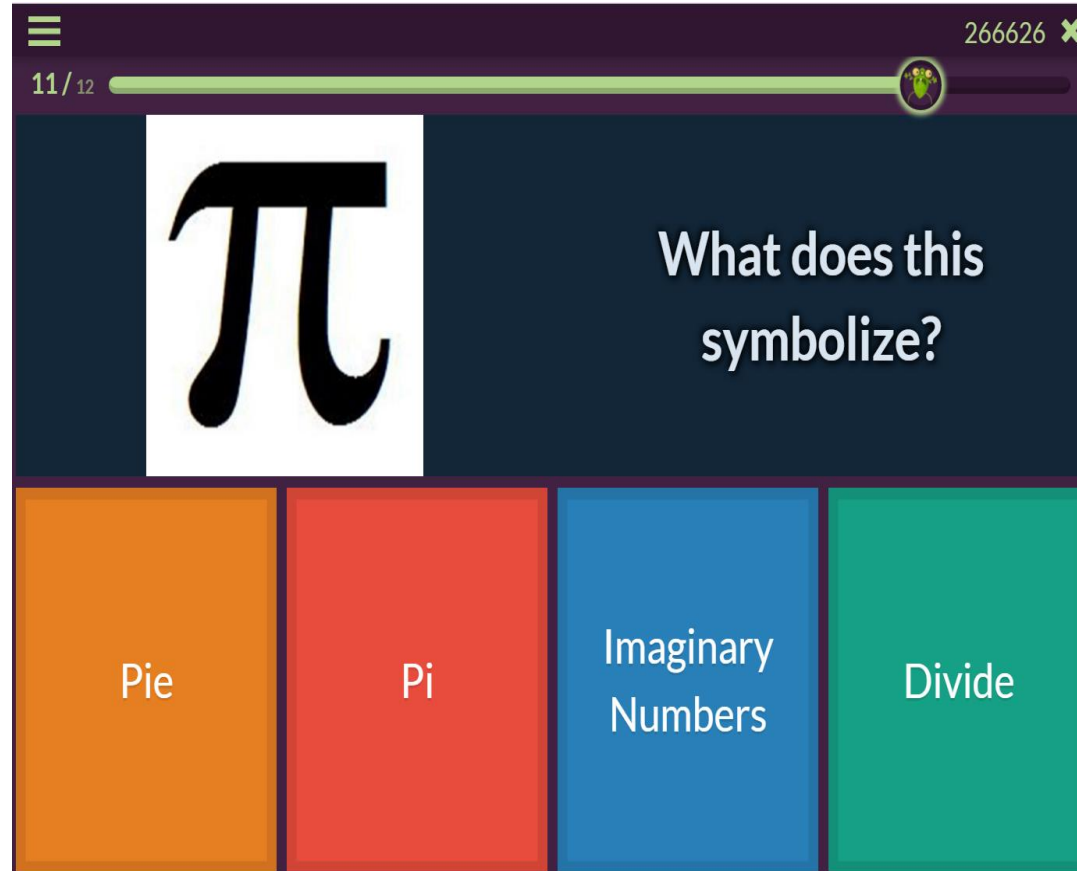
Quizizz

Cookie Rating:



Quizizz is a colorful online quiz and homework system. Students can compete live with quizzes or asynchronously complete homework that the teacher can later review. There is a large bank of quizzes or you can easily create your own.

<http://Quizizz.com>



☒ Participation ☐ Discussion ☐ Collaboration

Creating a Quizizz:

1 Select Create New Quiz!

2 Type in Question

3 Add Picture (Optional)

4 Type answers and Select "Correct"

5 Add new Question or Complete Quiz

The screenshot displays the Quizizz Creator interface. On the left, a list of questions is visible, with the first question selected. The main area shows the question: "A monster has 412 eyes. If he closes half his eyes, how many eyes are left open?". Below the question, there are four answer options: "51 R1", "206", "200", and "51 R2". The "206" option is marked as "correct" with a green checkmark. The "51 R1", "200", and "51 R2" options are marked as "incorrect" with red X's. To the right of the question, there is a "QUESTION PREVIEW" section showing the question text and the monster image. At the bottom right, there is a "Help" button. The interface is labeled with red numbers 1 through 5, corresponding to the steps in the text on the left.

1 Select Create New Quiz!

2 Type in Question

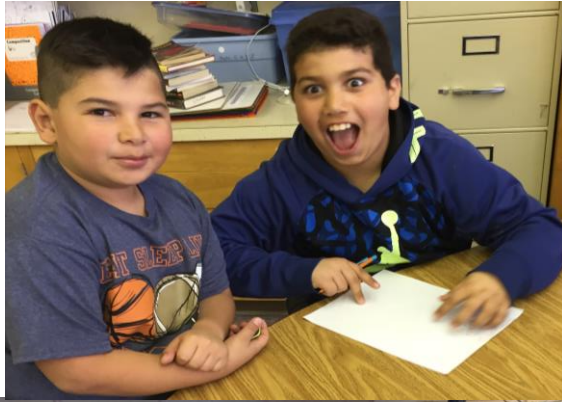
3 Add Picture (Optional)

4 Type answers and Select "Correct"

5 Add new Question or Complete Quiz

4th Grade Students Creating Own Quizizz:

Writing Questions
for Quizizz



Interacting with Quizizz



Reflecting on Quizizz

Try It Yourself!

[Join.quizizz.com](https://join.quizizz.com)

Enter Code: 123456

Kahoot

Cookie Rating:



Kahoot has a bank of pre-made quizzes or you can create your own. The quiz must be proctored live to play. Results are graphed and scored. Players only see the symbols on their device and not the questions.

<https://getkahoot.com/>

Are these 2 figures congruent?

18

0 Answers

Skip

☐ No

☐ Yes, by Translation

☐ Yes, by Rotation

☐ Yes, by Reflection

The image shows two quadrilaterals. The first is a green quadrilateral with vertices labeled L (top), M (right), N (bottom), and O (left). The second is an orange quadrilateral with vertices labeled Z (top), Y (right), X (bottom), and W (left). The question asks if these two figures are congruent.

☒ Participation ☐ Discussion ☐ Collaboration

Create a new kahoot



Quiz

Introduce, review and reward



Jumble

Brand NEW game



Discussion

Initiate and facilitate debate



Survey

Gather opinion and insight

Let's Try a 3
Question Jumble!

Kahoot.it

Enter code from
Screen when we
switch over to
internet.

bubble.us

Cookie Rating:

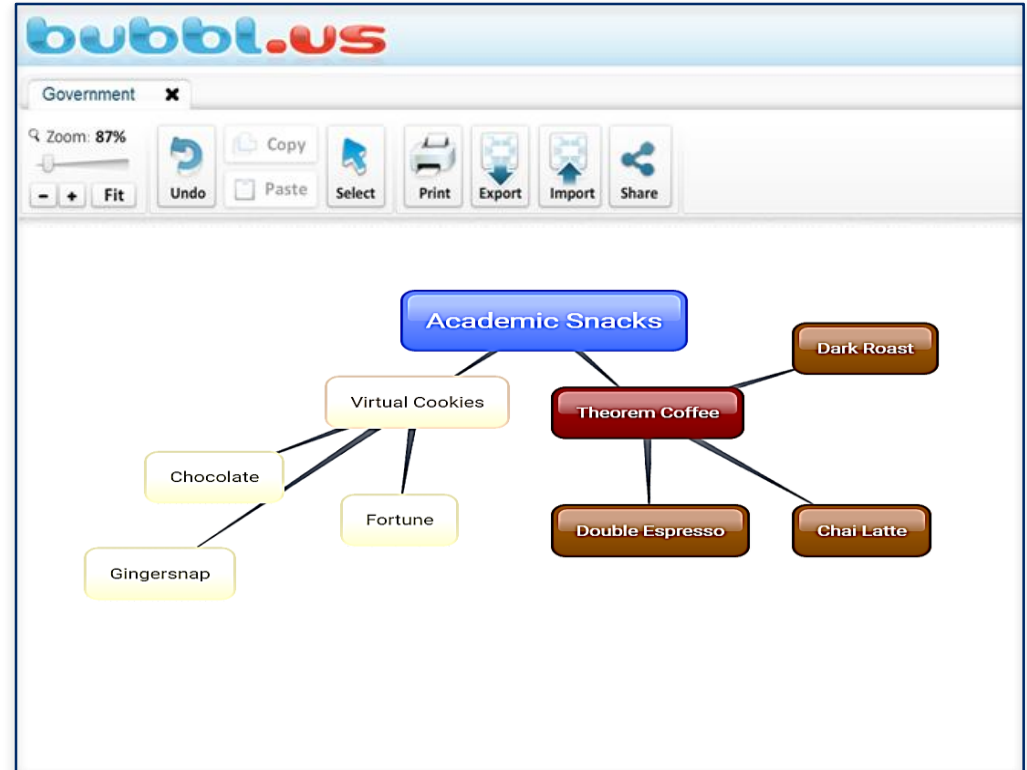


Internet browser (chrome, firefox, safari or edge) or as an iOS app.

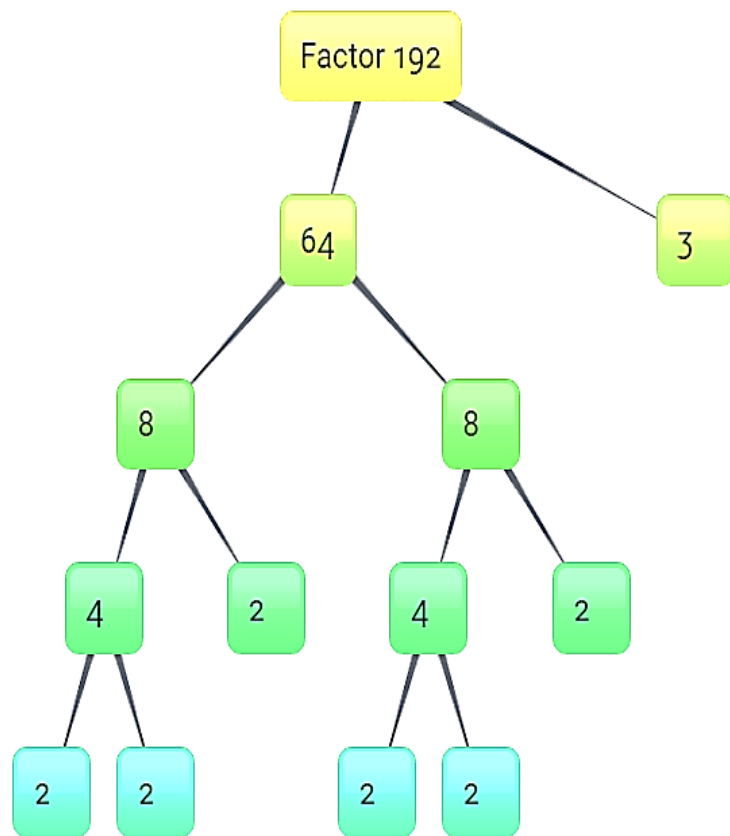
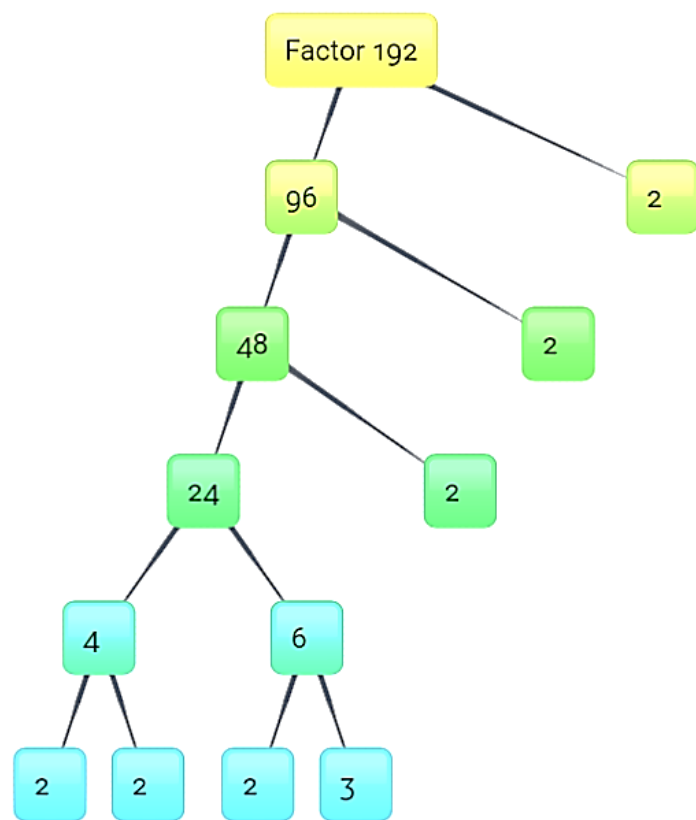
Drag and add bubbles and connections, change fonts and colors, and share the results.

Only one user can edit bubbl.us mindmaps at a time.

bubbl.us.com



☒ Participation ☒ Discussion ☐ Collaboration



desmos

Cookie Rating:



Desmos is a free online grapher and much more! Users can graph functions, relations, and data points.

There are also premade demonstrations that can illustrate things such as tangent lines, transformations, and trigonometric relations.

[desmos.com](https://www.desmos.com)

<https://www.desmos.com/> Graphing

Explore math with Desmos.

Graph functions, plot data, evaluate equations, explore transformations, and much more – for free!

Four Function and Scientific

Check out the newest additions to the Desmos calculator family.

[Four Function](#) [Scientific](#)

Teacher.desmos.com

Find the best digital activities for your math class — or build your own.

[Classroom Activities](#)

Learn.desmos.com

Level up your Desmos skills with videos, challenges, webinars, and more.

[Learn More](#)

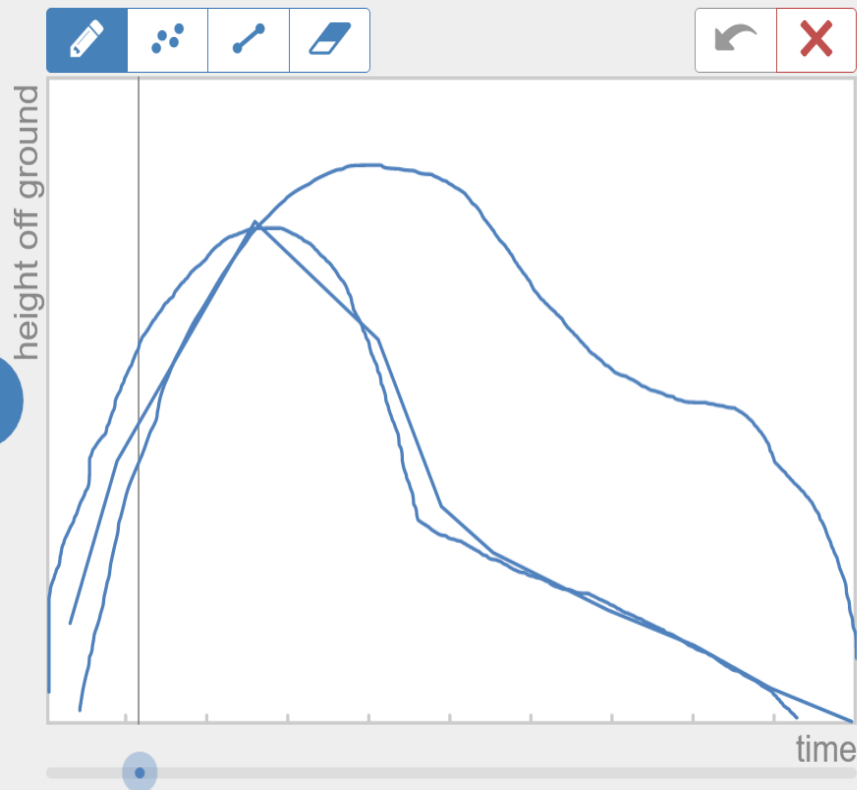
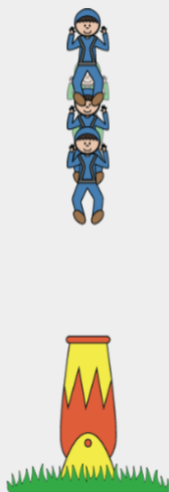
☑ Participation ☑ Discussion ☑ Collaboration



Let's Try One!

student.desmos.com
CLASS CODE: Gfayr

Draw a graph of Cannon Man's height v. time.



Padlet

Cookie Rating:



Padlet is a collaborative message board. You can share the link with a select group or post it publicly. You can also choose whether users can edit their own posts or any post. Double click or drag to post videos, images, attachments, or just messages. You can use Padlet as a blog, a discussion board or a place to collaborate about projects and assignments. Layout can be open or organized into grids and arrays.

<https://padlet.com>

Jumping Frog Problem

Data Story Problem



The Celebrated Jumping Frog of Calaveras County
Based on the 1865 short story by Mark Twain, this is ou...
youtube

Which frog will cross finish line with fewest jumps? A small frog (from 3in x 3 in Paper) or a large frog (from 6in x 6in paper)

Predictions:

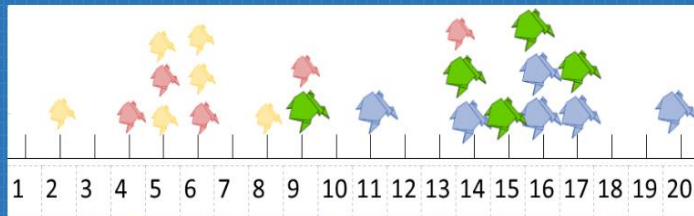
Small frog because it will be lighter

Big frog because it will jump farther in one jump



Jumping Frog - Let's Make Ori...
Web Japan > Kids Web Japan ...
web-japan

Build your frogs and graph them on the number line: Post picture here.



☑ Participation ☑ Discussion ☑ Collaboration

Let's Try One!

- Go to <https://padlet.com/che-mile/gbedjskgkxiy>
- Add a unique answer to the Math question! You are welcome to add an image, video, or text if you would like to test the features out!

Kristy Litster • 1m

Geometry in the Real World

Rotation, Reflection, Translation - Write an example of one in the real world OR insert a picture or video example.

ROTATION

A diagram showing a globe with a dashed circular arrow around it, indicating rotation. Four small green circles are positioned at the top, bottom, left, and right of the globe, connected by a dashed line.

REFLECTION

A photograph of a city skyline at night, with the lights of the buildings reflected in the water in front of them.

TRANSLATION

A cartoon illustration of two children sliding down slides. One child is at the top of a slide, and the other is at the bottom, having slid down.



Online
Community
for Educators

Cookie Rating:



Wikispaces is a collaborative project site where users can create documents, leave notes, upload files, or assign projects.

All contained within one 'classroom' where all group members and the instructor can see activity.



> Geome-tree

Search

Members

Projects



Apr 05 [Everyday geo...](#)

Welcome to Your Classroom!

Your Wikispaces Classroom is like the wiki you know and love with a few neat new tricks:

- Announce, schedule, and discuss in your newsfeed at the bottom of this page.
- Create projects -- with optional start and end dates -- for assignments and topic areas.
- Add pages, files, and more from the top right of every page.
- Assess student engagement in real time.

Click edit at the top right of this section to add your own welcome message and information about your class.

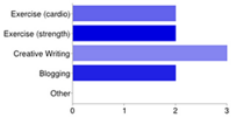
☒ Participation ☒ Discussion ☒ Collaboration



Summary

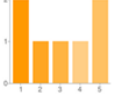
[See complete responses](#) [Publish analysis](#)

What Did You Work On?



Exercise (cardio)
Exercise (strength)
Creative Writing
Blogging
Other

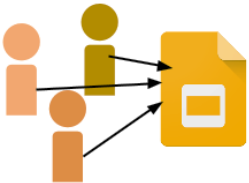
How was your mood today?



1 2 29%
2 1 14%
3 1 14%
4 1 14%
5 2 29%



Google Slides



Student
Collaboration 



Google Drive

Cookie Rating:



☒ Participation ☒ Discussion ☒ Collaboration

Mrs. Porter's 2nd Grade Class Survey

Please help our class as we study surveys and graphs. We would love to see how many responses we can get and all of the different places our responses come from. Each student in our class has created one of the questions in this survey.

* Required

Where are you from? (city, state, country) *

Your answer: _____

Are you a farmer? *

- ☐ Yes
☐ No

Do you like Pokemon? *

- ☐ Yes
☐ No

What is your favorite activity? *

- ☐ Coloring
☐ Board Games

Who is your favorite Frozen character? *

- ☐ Elsa
☐ Anna

Do you work at a school? *

- ☐ Yes
☐ No

What kind of food do you like? *

- ☐ Pizza
☐ Soup

What kind of animal do you like? *

- ☐ Giraffe
☐ Zebra

Do you like Legos? *

- ☐ Yes
☐ No

What zoo animal do you like? *

- ☐ Lion
☐ Monkey

Do you like ice cream? *

- ☐ Yes
☐ No

What is your favorite store? *

- ☐ Toys R Us
☐ Wal-Mart

Are you on YouTube? *

- ☐ Yes
☐ No

What color hair do you have? *

- ☐ Brown
☐ Blonde
☐ Other: _____

What is your favorite subject? *

- ☐ Science
☐ Math

Which state do you like more? *

- ☐ Indiana
☐ Illinois

Are you married? *

- ☐ Yes
☐ No

Does your name start with a vowel or consonant? *

- ☐ Vowel
☐ Consonant

Do you live in a house or an apartment? *

- ☐ House
☐ Apartment

Can you write in cursive? *

- ☐ Yes
☐ No

PollEverywhere

Cookie Rating:



Poll Everywhere is a survey site that allows you to give surveys and view results instantly. Four different types of questions offer a variety of responses.

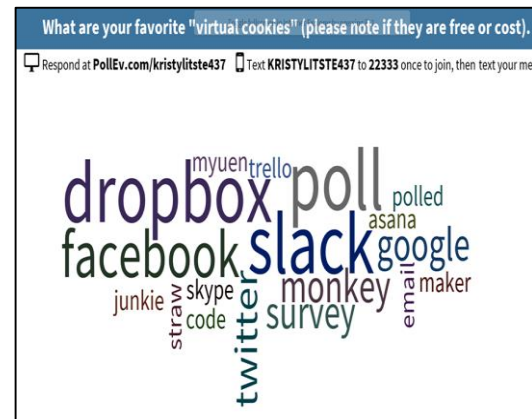
You are limited to 40 participants at the free level. Responses can be reset. Another limitation is that the poll can only be taken when the presenter is currently showing the results. This means that only one poll or question can be active at a time.

Polleverywhere.com

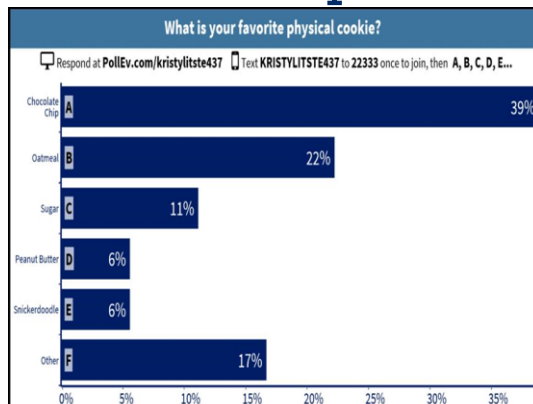
Clickable Image



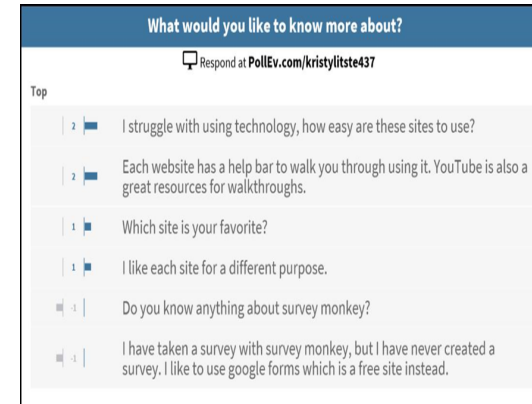
Open Text



Bar Graph



Q & A



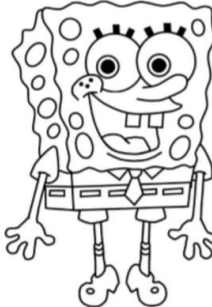
☒ Participation ☒ Discussion ☐ Collaboration

Clickable Image:

Clickable image allows you to use a preset image or upload your own. Students click a location to choose an answer. You can also track answers to specific locations within the image. Clickable Image require a website response.

Is Spongebob correct? If yes, click on the "correct" button. If incorrect, identify a place where Spongebob made an error.

When poll is active, respond at PollEv.com/kristylitste437



729
 $\begin{array}{r} \times 3 \\ \hline 21627 \end{array}$

3x9 ones = 27 ones
3x2 tens = 6 tens
3x7 hundreds = 21 hundreds
So I write 27,6, and 21 together for the answer.

Spongebob is Correct

Poll Everywhere

Open Text:

Open Text allows students to submit their thoughts and opinions in their own words. You can display open text as a wordle, text boxes, or a rolling script.

How would you answer this question posed by a Math Teacher? "But I thought what is wanted is a practical course, and everywhere I encounter theory. How can my course be practical if I teach all this theory?"

When poll is active, respond at PollEv.com/kristylitste437

Text KRISTYLITSTE437 to 37607 once to join

"As students and teachers better understand the theory, they can more easily recognize the practical sides of mathematics education by understanding the development, thought, and background of the concepts."
over 1 year ago

"What good is practicality unless comprehension and transfer take place?"
over 1 year ago

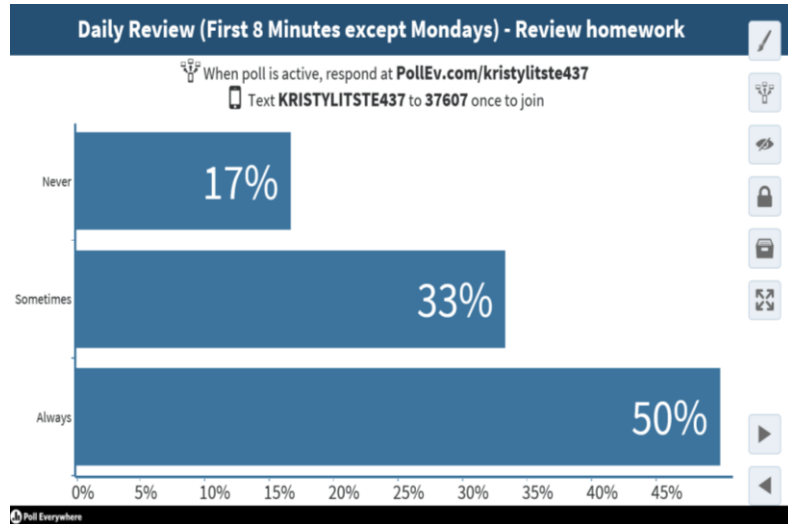
"Exploring learning and reflecting on "why" the learning occurs allows individuals the opportunity to generalize a broader understanding for several situations. Thus, learning comes from know "why."
over 1 year ago

"I think that practical and concrete should be taught first and the theory should be an extension of a practical and concrete basis. Also think that application of theory in situations that are relevant to my students' experience are important to help my students value the

Poll Everywhere

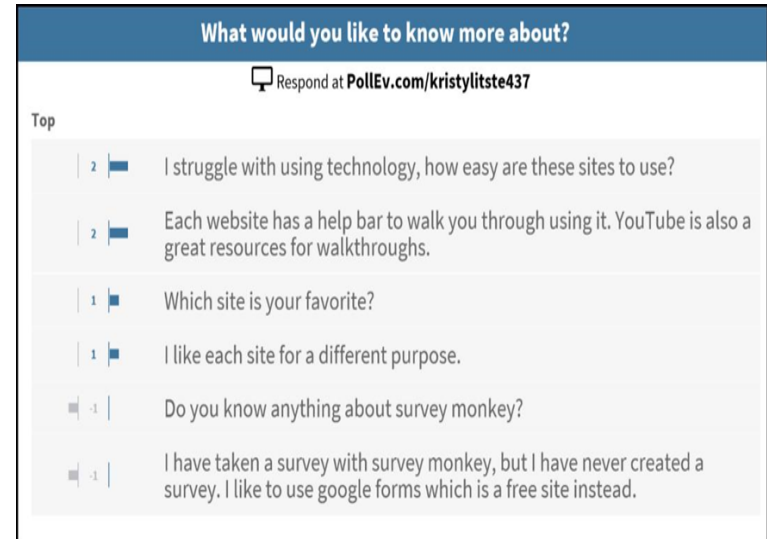
Bar Graphs

Use a bar graph when you already have a specific set of answers in mind. It will graph the responses.

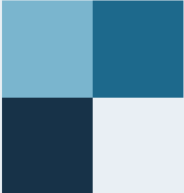


Q&A

Q&A allows interaction between people to post questions and answers. They can also vote on favorite responses and questions. Clickable Image and Q&A polls require a website response.



Let's Try Some!



Your poll will show here

1

Install the app from
pollev.com/app

2

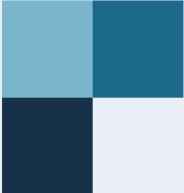
Make sure you are in
Slide Show mode

Still not working? Get help at pollev.com/app/help

or

[Open poll in your web browser](#)





Your poll will show here

1

Install the app from
pollev.com/app

2

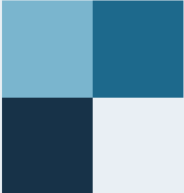
Make sure you are in
Slide Show mode

Still not working? Get help at pollev.com/app/help

or

[Open poll in your web browser](#)





Your poll will show here

1

Install the app from
pollev.com/app

2

Make sure you are in
Slide Show mode

Still not working? Get help at pollev.com/app/help

or

[Open poll in your web browser](#)



“Technology is just the tool. In terms of getting the kids working together and motivating them, the teacher is the most important.”

~Bill Gates

Thank You!

Kristy Litster

Chemile@Hotmail.com

Christina Watts

CWatts1212@gmail.com

