

# CCSS – and Math – AND Web 2.0



# Summaries are Helpful

## Grade 3 Overview

### Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

### Number and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

### Number and Operations—Fractions

- Develop understanding of fractions as numbers.

### Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

### Geometry

- Reason with shapes and their attributes.

### Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

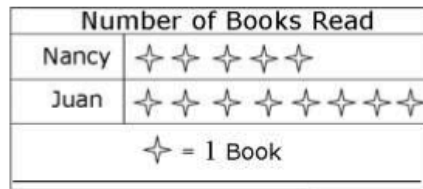
[http://commoncoretools.me/wp-content/uploads/2011/02/ccssi\\_math\\_standards\\_hyperlinked\\_1-0.pdf](http://commoncoretools.me/wp-content/uploads/2011/02/ccssi_math_standards_hyperlinked_1-0.pdf)

# FlipBooks of Content/Ideas

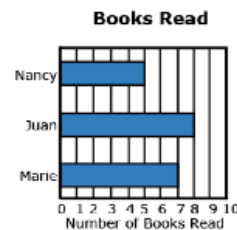
<http://katm.org/wp/wp-content/uploads/flipbooks/>

Students should draw both picture and bar graphs representing data that can be sorted up to four categories using single unit scales (e.g., scales should count by ones). The data should be used to solve put together, take-apart, and compare problems as listed in Table 1, page 49.

In second grade, picture graphs (pictographs) include symbols that represent single units. Pictographs should include a title, categories, category label, key, and data.



Second graders should draw both horizontal and vertical bar graphs. Bar graphs include a title, scale, scale label, categories, category label, and data.



# Twitter (yes, Twitter)

<http://twitter.com>

Follow Common Core on Twitter at these hashtags:

[#ccss](#), [#ccchat](#), [#commoncore](#)

Also Tweetchats like:

#mathchat Mondays at 3:30 PM ET

(more at: <http://goo.gl/eYx8g3> )





A close-up photograph of a child's hands, wearing a pink long-sleeved shirt, playing with colorful wooden blocks on a wooden table. The child is in the process of stacking or unstacking the blocks. The blocks are in various colors including green, red, orange, and dark brown. The background is softly blurred, focusing attention on the hands and the blocks.

Not just **DO** the Math,

**Use** the Math

# Problems to Solve

## Problem of the Month

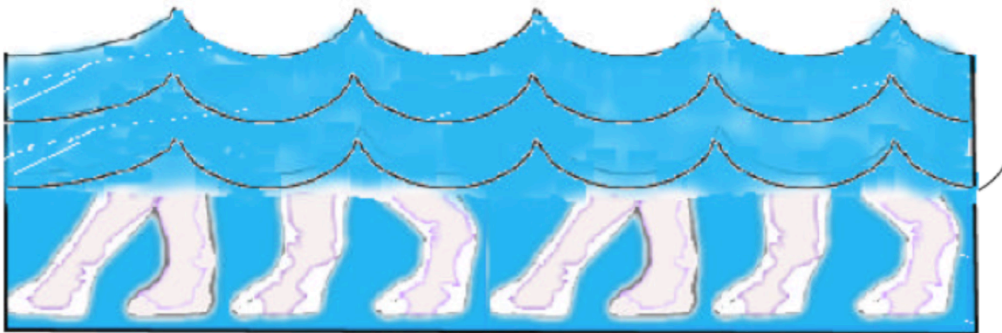


### Digging Dinosaurs



#### Level A:

You are swimming under water in a lake and you see dinosaur feet in the water. You don't want to go to the surface in case they are not friendly dinosaurs. Below is a picture of what you see.

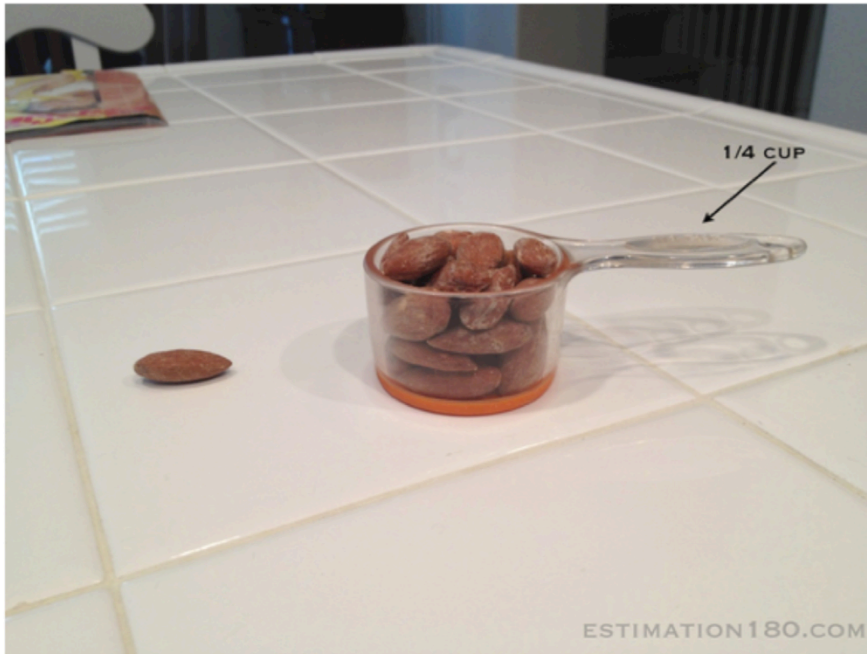


How many dinosaurs are standing in the lake?  
Explain how you know. Use words and mathematical language to explain your solution.

<http://insidemathematics.org/index.php/tools-for-teachers/problems-of-the-month>

# Estimation

How many almonds in the cup?



Answer

Other estimates

Make an estimate.

\* Required

Estimate \*

Name \*

How confident are you? \*

1 2 3 4 5

Barely      Extremely

Share your reasoning. \*

What context clues did you use?

Submit

Never submit passwords through Google Forms.

Powered by [Google Docs](#)

<http://www.estimation180.com/index.html>



# Interactives

The image shows an interactive math game interface. At the top left, the equation  $11 - 6 = 5$  is displayed in large, white, rounded font on a blue background. To the right of the equation are several icons: two blue arrows pointing left and right, a red die, two white clouds, a white iceberg, and a blue wave. Below the equation is a large illustration of a penguin colony on an ice floe. The background is split into a light blue sky and a dark blue ocean. In the ocean, there are several blue fish and a large, jagged iceberg. At the bottom, there is a yellow number line from 0 to 20. A green arc is drawn from 0 to 11, and a red arc is drawn from 11 to 5. Below the number line are two white input fields with blue sliders. The first slider is positioned at 11, and the second slider is positioned at 5. To the right of the number line is a small green box with a number line from 0 to 5 and two arcs (one blue, one red) above it. Below this box is a green checkmark icon.

<http://www.visnos.com>

# Titanpad

<http://titanpad.com>

<http://glovely.titanpad.com/7> (password: letmein)

The screenshot displays the Titanpad web interface. At the top, the document title is "Ways to make 64 (rename)". The navigation bar includes "Security", "Pad Options", "Import/Export", "Saved revisions", and "Time Slider". The main editing area contains a list of items:

- 1 List a NEW way to make 64.
- 2 60 + 4
- 3
- 4

The right sidebar shows the user "Gail Lovely" and an "Invite" link with the text "other users and they will show up here." Below this is a "Share this pad" button and a date stamp "July 31, 2013".

# Padlet -

<http://padlet.com>

<http://padlet.com/wall/8zzsc8qgds>

## Math Stories

$12 + 3 + 4 =$  make a word sentence which could be represented by this equation.

### Sam

There were 12 eggs in the carton we got at the store. When we got home we found 3 more in the barn and 4 in the refrigerator. We have 19 eggs at home now.



# Today's Meet

Today'sMeet

Listen

my mom says if I learn the times tables I will be faster than adding.

less than a minute ago by Freddy

I wonder if I can add instead of multiply

2 minutes ago by Gail


Talk

Message:

140

Say

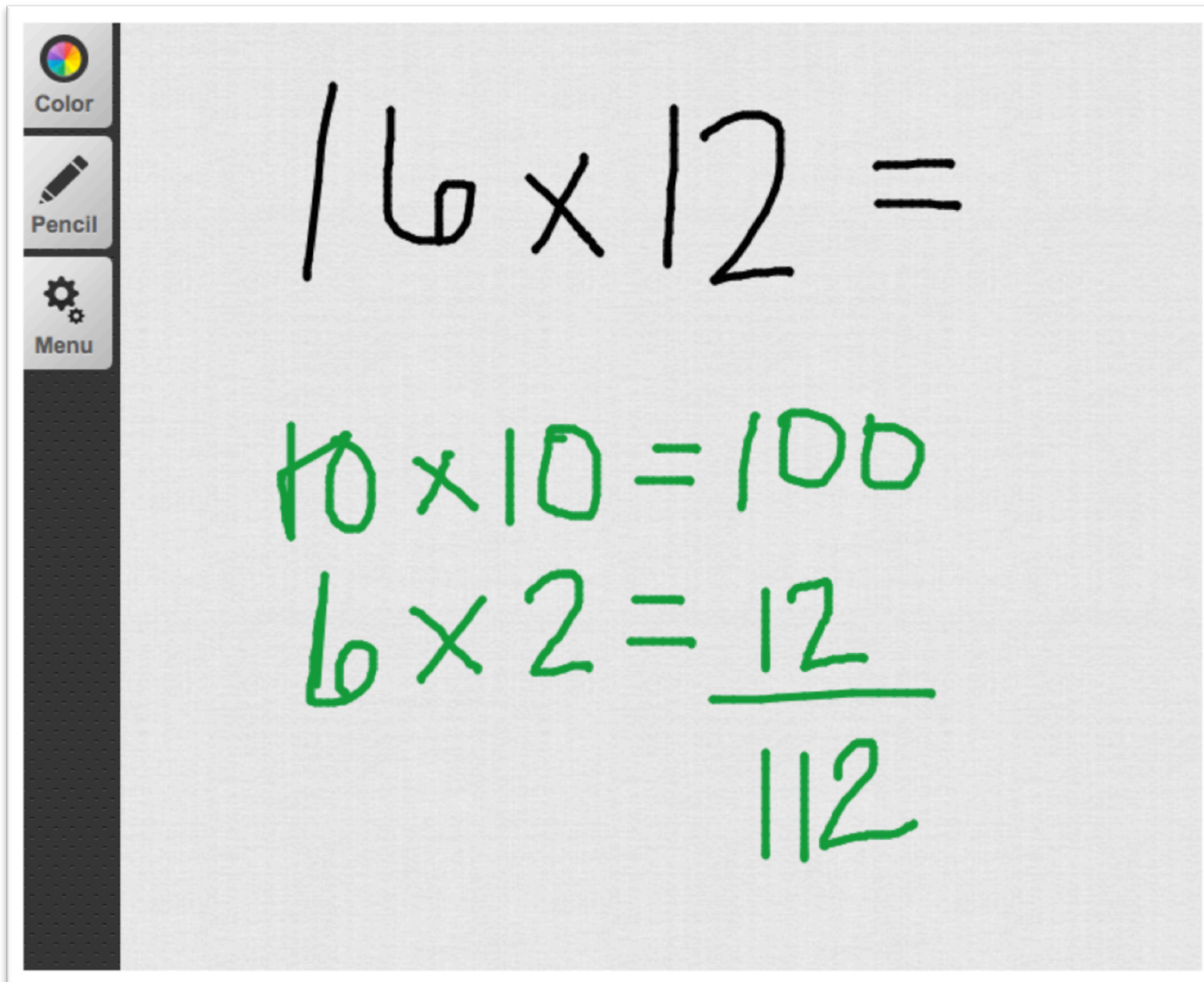
<http://today.io/RQ2k>

transcript | projector | 

<http://todaysmeet.com/>

# AWW (A Web Whiteboard)

<http://awwapp.com/>



The screenshot shows a web whiteboard interface with a toolbar on the left containing icons for Color, Pencil, and Menu. The main area contains the following handwritten text:

$$16 \times 12 =$$
$$10 \times 10 = 100$$
$$6 \times 2 = \frac{12}{112}$$

# Create-a-Graph



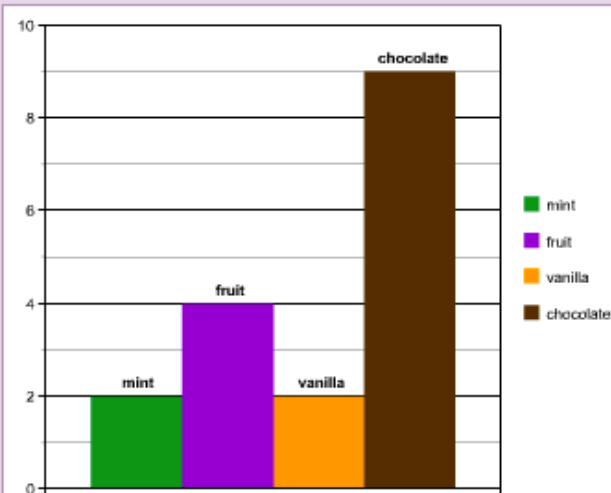
## CREATE A GRAPH

### Help

**Graph Preview:** shows you the current state of your graph. To make changes, click the *Design*, *Labels*, and *Data* tabs. To print or download this graph, click the *Print/Save* tab.

### Examples

It is recommended that you have [Macromedia Flash Player](#) installed for the best quality preview with the fastest loading time.



Design

Data

Labels

Preview

Print/Save

<http://nces.ed.gov/nceskids/createagraph/default.aspx>

# Problems to Mimic

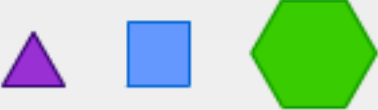
Drag the shapes onto the work area. Position and rotate them according to the description. Click "Reveal Design" when you are finished.

Description 1

The design looks like a bird with

- a hexagon body;
- a square for the head;
- triangles for the beak and tail; and
- triangles for the feet.

**REVEAL DESIGN**



← INTRO | Try another description | Clear **Open Instructions**

[http://www.learner.org/courses/learningmath/geometry/session1/part\\_b/index.html](http://www.learner.org/courses/learningmath/geometry/session1/part_b/index.html)

# Google Maps

Google



gaillovely@gmail.com



Get directions

My places



## Distance Measurement Tool

Click on the map to trace a path you want to measure.

Units:

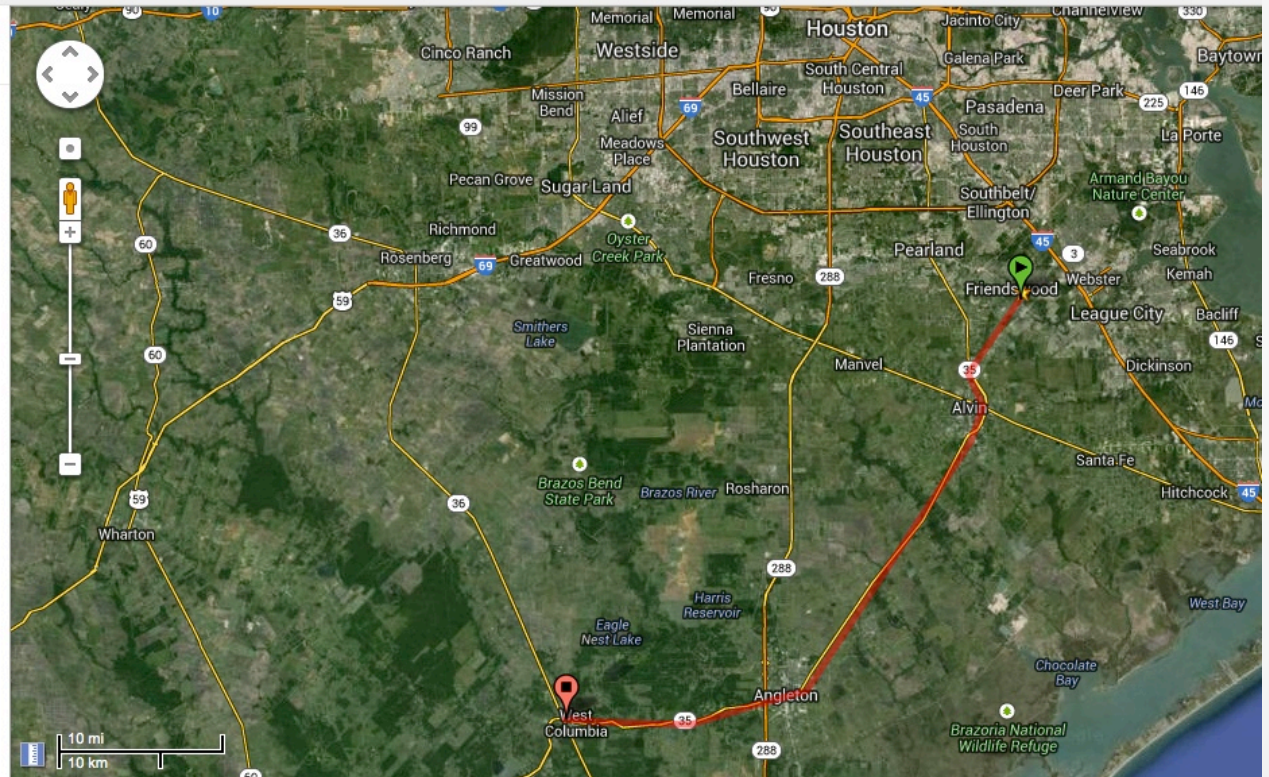
Foot

« less

Total distance:  
**229735 ft**

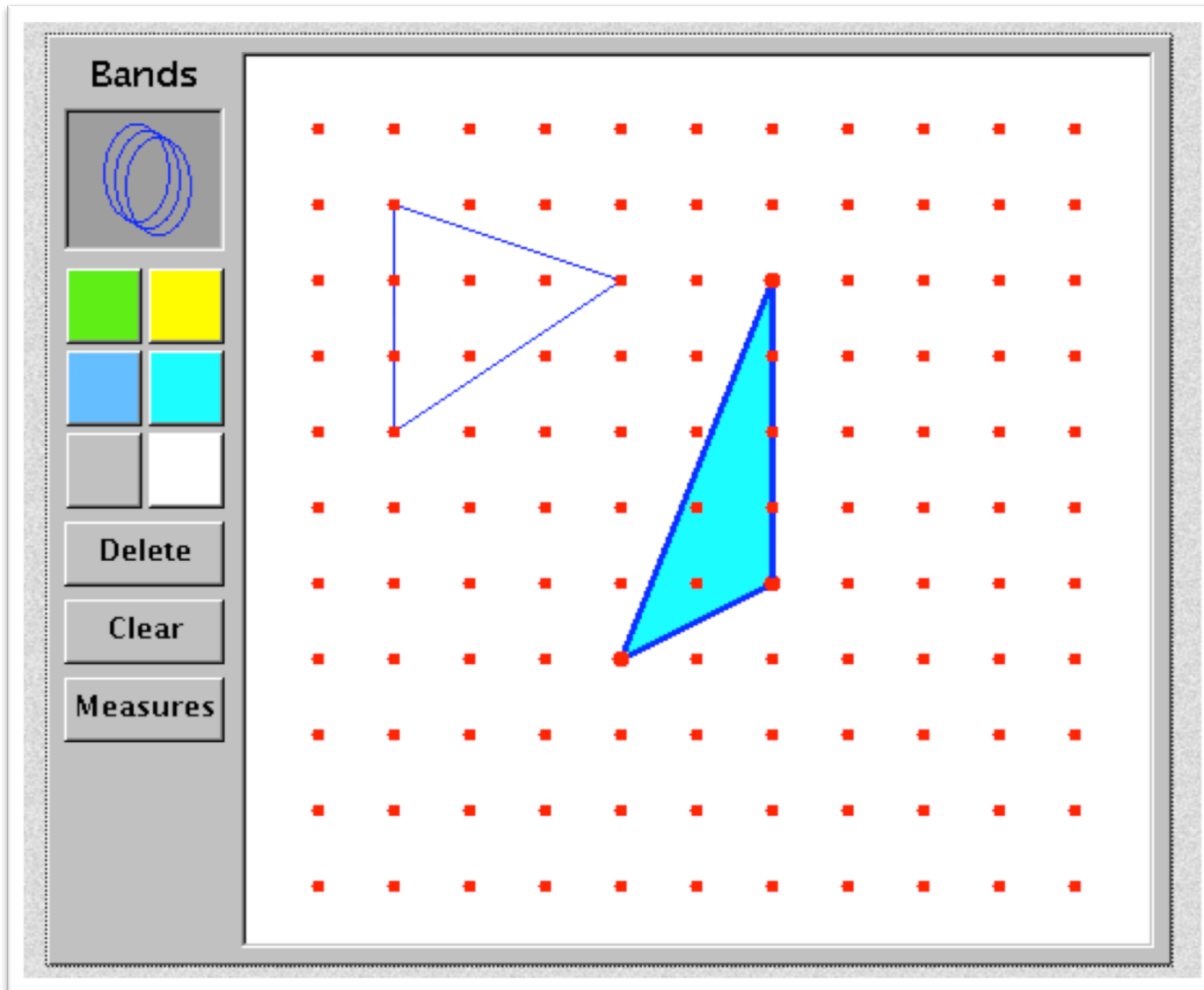
Delete last point

Reset





# Virtual Manipulatives



<http://nlvm.usu.edu/>



# Virtual Manipulatives

The image displays a virtual manipulative interface for a scale. On the left, a scale is shown with a red pan at the top containing a grey spaceship. The dial is green with a yellow face and numbers from 0 to 20. A red needle points to the number 8. Below the scale, there are three toy icons: a yellow car, a brown horse, and a yellow duck. On the right, a blue control panel titled "Simple Scales" contains a "Control Panel" section for changing visibility settings. It includes "Dial Numbers" (1, 2, 3), a "Needle" (a red arrow), "Toys" (Horse, Spaceship, Car, Duck), a "Scale pan" (a red pan icon), and "Bottom toys" (a purple rectangle). At the bottom of the interface, there are three toy icons: a yellow car, a brown horse, and a yellow duck.

**Simple Scales**

**Control Panel**  
For changing visibility settings

1 2 3  
Dial Numbers

Needle

**Toys**

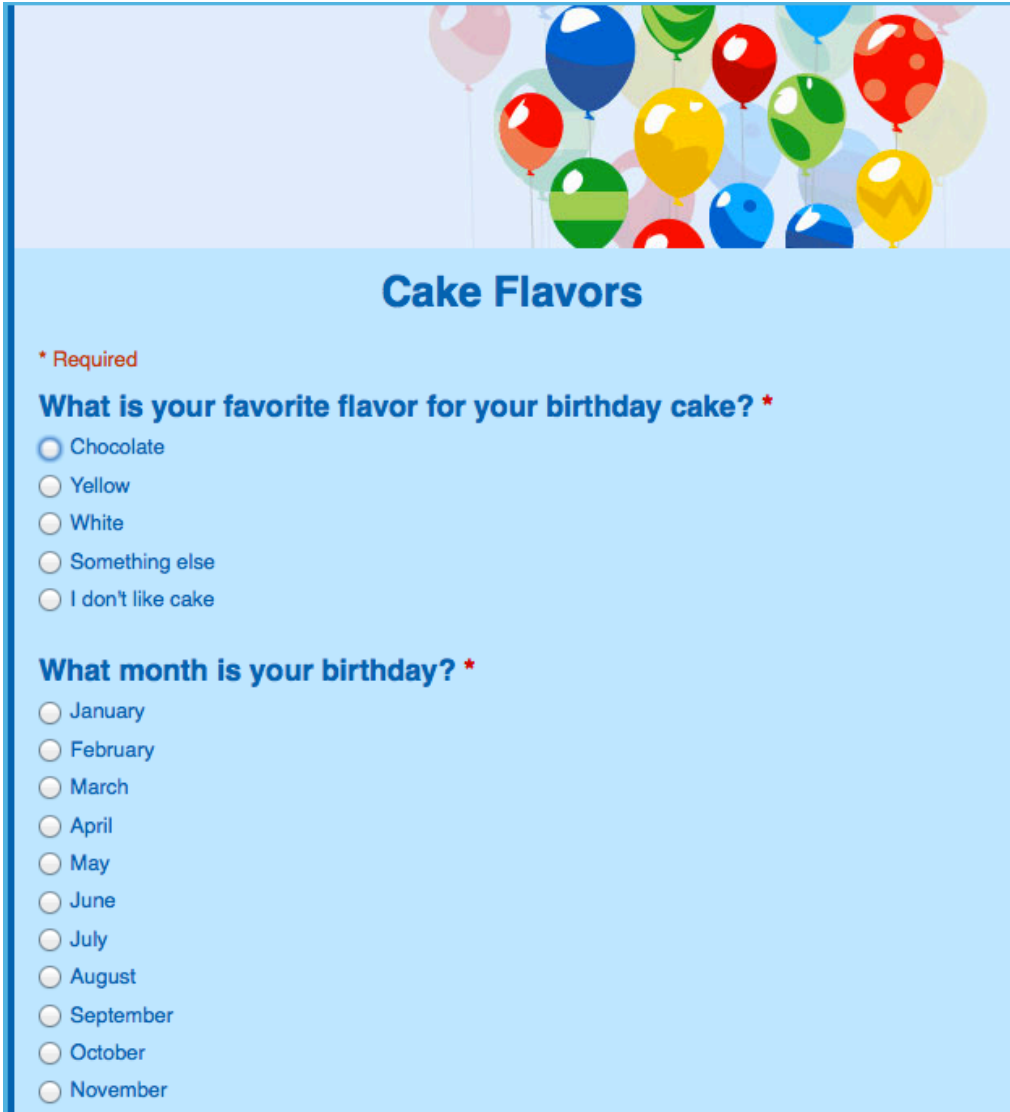
Horse Spaceship Car Duck

Scale pan Bottom toys

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<http://www.crickweb.co.uk/ks1numeracy.html>

# Google Forms



**Cake Flavors**

\* Required

**What is your favorite flavor for your birthday cake? \***

Chocolate

Yellow

White

Something else

I don't like cake

**What month is your birthday? \***

January

February

March

April

May

June

July

August

September

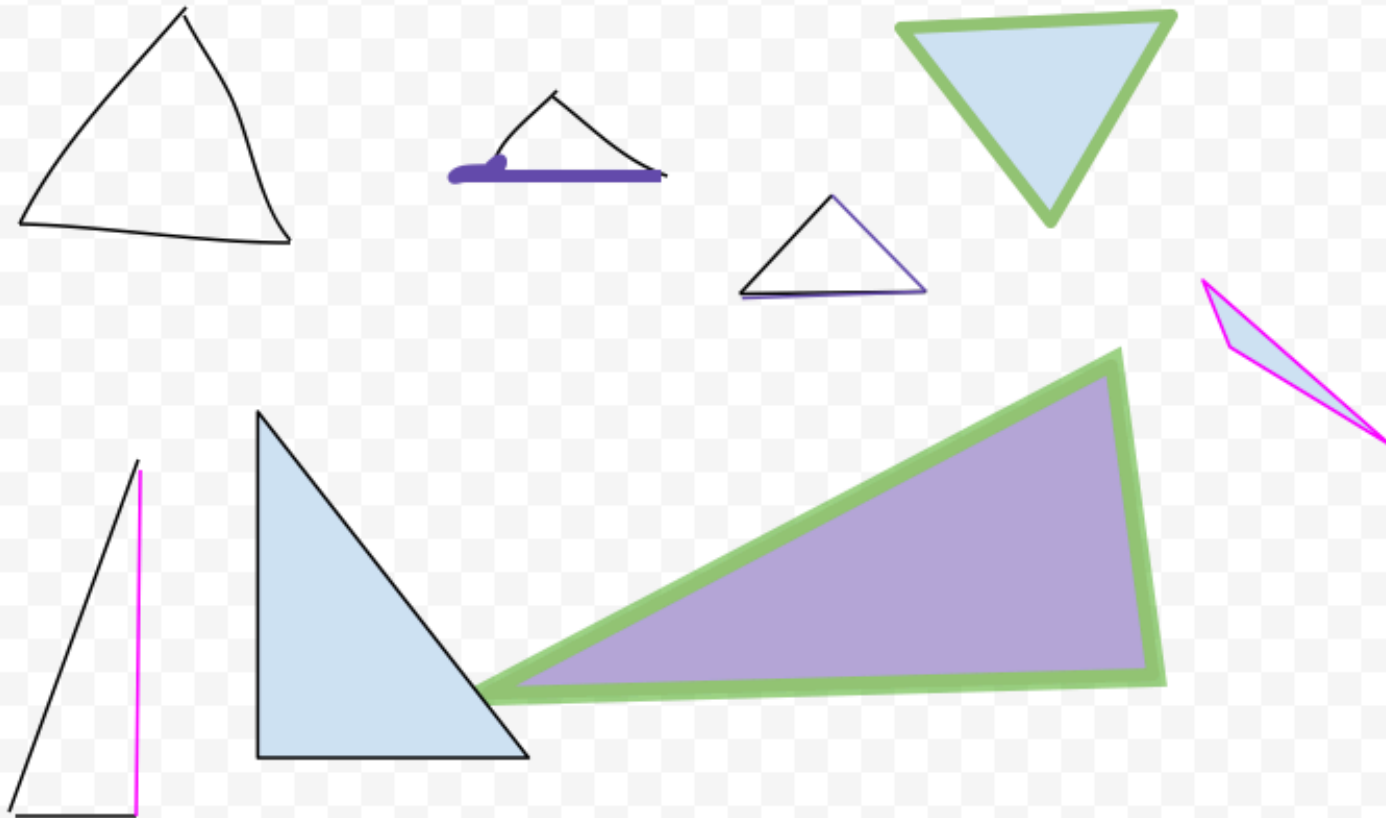
October

November

[https://docs.google.com/forms/  
d/  
1yZHT07kXPnpOGC15v9rUqhuW0  
G8bsl6LvFpblZpzgQ/viewform](https://docs.google.com/forms/d/1yZHT07kXPnpOGC15v9rUqhuW0G8bsl6LvFpblZpzgQ/viewform)

# Google Docs (Drawings)

Draw triangles, make yours different from all the others.

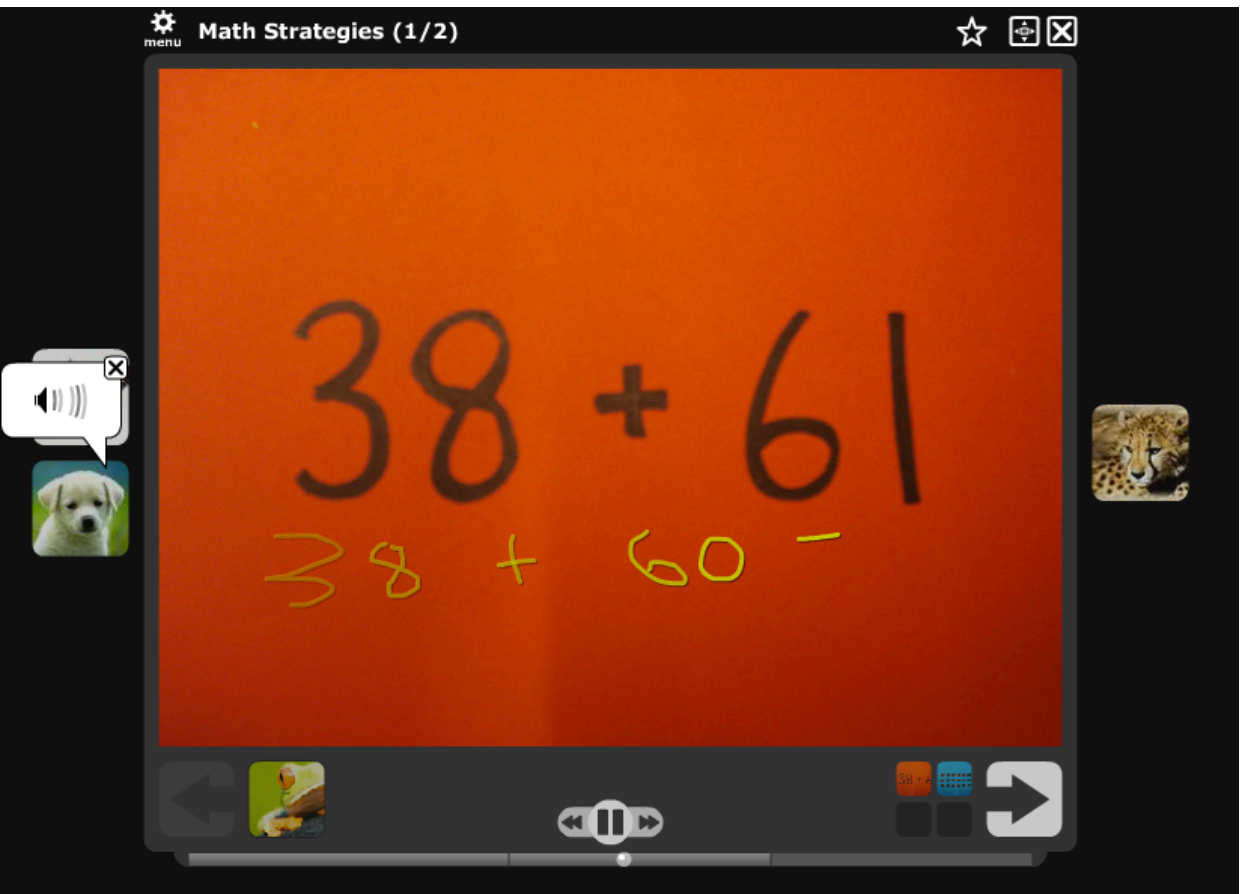


# Wikis

The screenshot shows a web browser displaying a wiki page. The browser's address bar shows the URL <http://makingnumbers.wikispaces.com/>. The page title is "Ways to Make 14". Below the title, the text "Ways to Make 14:" is visible. The page has a green header with "MakingNumbers" and a search bar. The right sidebar contains a navigation menu with items: Wiki Home, Projects, Recent Changes, Pages and Files, All Pages, home, Ways to Make 0 (zero), Ways to Make 14, Ways to Make 42, and edit navigation. The user's name "glovely" and "My Wikis" are visible in the top right corner of the page.

<http://wikispaces.com>  
<http://>  
[makingnumbers.wikispaces.com/](http://makingnumbers.wikispaces.com/)

# Voicethread



The screenshot shows a Voicethread interface with a whiteboard. The whiteboard has an orange background and displays the math problem  $38 + 61$  in black handwriting. Below it, the same problem is written in yellow handwriting as  $38 + 60 + 1$ . The interface includes a top bar with a gear icon, the text "Math Strategies (1/2)", and icons for star, share, and close. On the left, there is a chat icon and a profile picture of a white dog. On the right, there is a profile picture of a cheetah. At the bottom, there are navigation icons for back, forward, and a volume icon.

<http://Voicethread.com>

<https://voicethread.com/?#q+math.b242424.i1262967>

<https://voicethread.com/?#q+math.b163901.i873468>

# Online Stickies

The screenshot shows the PrimaryWall interface. At the top left is a '+ Add a note' button. Two sticky notes are visible: a pink one and a yellow one. The pink note contains a math problem about money, and the yellow one contains a math problem about stickers. To the right, a sharing menu is open, showing options for security, sharing, and linking. It includes a 'Copy and paste the below link to share this wall' section with the URL <http://glovely.primarywall.com/2>, a 'Read Only Link' section with the URL <http://glovely.primarywall.c>, and an 'Embed code for this wall' section with an iframe code snippet. At the bottom of the menu is an 'Export this wall as a list' option with a 'Send note contents to wordle' button. The PrimaryWall logo and 'PrimaryWall from Primary Technology ©' are at the bottom right.

<http://primarywall.com>  
<http://glovely.primarywall.com/2>

What I learned, what I wonder about  
Ways to solve a problem



# In general...



Look for tools to experiment with math concepts and ideas

Look for tools for sharing and justifying ideas

Look for tools to create “conversations”



Thank you  
please email me if you have ANY  
questions or comments:  
[Gail@GailLovely.com](mailto:Gail@GailLovely.com)

Resources also online at:

<http://www.lovelylearning.com/ccss-math-and-web-20.php>