## Sample Questions:

Using Calculators, Tools, and Math Question Types within Schoology

## MATH SHORT ANSWER - Use Protractor:

Use the protractor tool to measure $\angle \mathrm{BAG}$ and $\angle \mathrm{BCD}$. Use the measures of these angles to determine the measures of $\angle \mathrm{CAB}, \angle \mathrm{ABC}$, and $\angle \mathrm{ACB}$. You must show your work to receive full credit. Your answer should include the measure of all five angles.


NOTE: You will have to use the Equation Editor under the Sigma $(\Sigma)$ to get the angle sign ( $\angle$ ).

| SET UP |  |  |
| :---: | :---: | :---: |
| Symbols | - Basic <br> - Keyboard <br> - Geometry | You will need to add an option for a symbols keyboard (Geometry). |
| Text Blocks | $\begin{array}{ll} \bullet & B A G \\ \bullet & B C D \\ \bullet & C A B \\ - & A B C \\ - & A C B \end{array}$ | Students will have to type correct capitalizations for these to work. |

## Correct Answer:

$m \angle B A G=118^{\circ}$
$m \angle B C D=131^{\circ}$
$m \angle C A B=180^{\circ}-118^{\circ}=62^{\circ}$
$m \angle A C B=180^{\circ}-131^{\circ}=49^{\circ}$
$m \angle A B C=180^{\circ}-62^{\circ}-49^{\circ}=69^{\circ}$

## MATH SHORT ANSWER - Chemistry:

Write the balanced equation for the following reaction.

## Aluminum sulfate + calcium hydroxide $\rightarrow$ aluminum hydroxide + calcium sulfate

NOTE: In Schoology, the arrow is under the Omega $(\Omega)$ rather than the Sigma $(\Sigma)$.

| SET UP |  |  |
| :--- | :--- | :--- |
| Symbols | $\bullet$ <br> $\bullet$ <br> • Kasic <br> Keyboard | These should be default. |
| Text | $\bullet$ | AI |
| Blocks | $\bullet$ | SO |
|  | $\bullet$ Ca <br>  OH <br>  CaSO | Students will have to type <br> correct capitalizations for <br> these to work. |
|  |  |  |

## Correct Answer:

$\mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}+\mathrm{Ca}(\mathrm{OH})_{2} \rightarrow \mathrm{Al}(\mathrm{OH})_{3}+\mathrm{CaSO}_{4}$
$\mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}+3 \mathrm{Ca}(\mathrm{OH})_{2} \rightarrow 2 \mathrm{Al}(\mathrm{OH})_{3}+3 \mathrm{CaSO}_{4}$

## CHART: Dot Plot

Kaley asked some of the students in her school how long it took them to eat breakfast each morning. She made the table below. Use the data in the table to complete the dot plot of the information.

| Minutes | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| People | 6 | 2 | 3 | 5 | 2 | 5 | 0 | 0 | 2 | 3 | 7 | 4 | 2 |

## Setup:

Title:
How long does it take you to eat breakfast?

Max Y-Axis Value:
10

X-Axis Title:
Minutes to Eat Breakfast

Y-Axis Title:

## Additional Setup options:

- Set the Chart Type to Dot Plot Chart.
- Set Snap to Points to 1.

X-Axis Setup: Each "Point" should be a number from 0 to 12. Start each point at Value $=1$ (this will show what it does), and make sure they are interactive.

X-Axis Setup


## Correct Answer:



NUMBER LINE - American History:
Place the inventions in order on the number line by the year they were invented.

Minimum Value: $1730 \quad$ Maximum Value: 1850

## Additional Setup Options:

- Uncheck Snap to Ticks
- Tick Distance $=20$

| Possible Responses: | Year of Invention: |
| :--- | :--- |
| Cotton Gin | 1793 |
| Gas Mask | 1847 |
| Lightning Rod | 1749 |
| Lobster Trap | 1808 |
| Bifocals | 1784 |
| Sewing Machine | 1833 |

## Correct Answer:



USE RULER - Geography/Social Studies:
Use the map below to answer the question.


Miles walked from the USS Midway Museum to Petco Park in San Diego. The gray/blue dotted line is his path. Use the ruler tool to measure the path Miles walked in inches. If the map scale is 1 inch $=1 / 4$ mile, approximately how far did Miles walk? Show your work for full credit.

Correct Answer: 1.75-2.0 miles, depending upon measurement (7-8 inches).

## CHART - Foods:

Question Text: Marlon wants to make brownies for his class. He will need to double his recipe to make enough brownies for everyone. Double Marlon's recipe and use the bar chart to show how much of each ingredient Marlon will need to make a double batch of brownies.

## Five-Ingredient Brownies

INGREDIENTS
$1 / 2$ cup flour
1 cup sugar
$1 / 2$ cup salted butter, melted
2 eggs
1/3 cup cocoa powder

|  |  |
| :--- | :--- |
| Title: |  |
| Max Y-Axis Value: | 5 |
| X-Axis Title: | Ingredients |
| Y-Axis Title: | Amount |
|  |  |
| X-Axis Setup |  |


| Point 1: | Label: | Sugar (Cups) | Value: | 0 | $\checkmark$ Interactive | $x$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Point 2: | Label: | Butter (Cups) | Value: | 0 | $\checkmark$ Interactive | $\times$ |
| Point 3: | Label: | Flour (Cups) | Value: | 0 | $\checkmark$ Interactive | $\times$ |
| Point 4: | Label: | Eggs | Value: | 0 | $\checkmark$ Interactive | $x$ |
| Point 5: | Label: | Cocoa Powder (Cups) | Value: | 0 | $\checkmark$ Interactive | $x$ |

Setup:
Point 5: Label: Cocoa Powder (Cups)
Value: 0
$\checkmark$ Interactive $x$

## Additional Setup Options:


$\vee$ ADDITIONAL SETUP OPTIONS


## Correct Answer:



## NUMBER LINE:

Question text: Place the numbers in order on the number line.

- Minimum value $=-5$
- Maximum value $=5$
- Turn off "Snap to Ticks"
- Turn on Show first \& show last
- Turn on left arrow \& right arrow
- Make Correct Response Threshold $=0.2$


## $0.5,-3,4.3,1 \frac{1}{2},-1.2,31 / 4,-4 \frac{2}{3}$

## Correct Answer:



## MATH SHORT ANSWER:

Question text: Write the equation for the circle shown below.


Correct Answer: $(x+1)^{2}+(y-2)^{2}=49$

## CHART:

Tally the number of each word in the box below: like, look, this, that. Then, complete the bar graph to show how many of each word is in the box.

|  |  |
| :---: | :---: |
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|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


| - Title: Sight Word Count | X-Axis Setup: |
| :--- | :--- |
| - Max \&-Axis: 12 | Point 1: look |
| - X-Axis title: Words | Point 2: like |
| - Y-Axis title: How Many | Point 3: this |
|  | Point 4: that |

Correct Answer:
Sight Word Count


