## Formative Assessment

By the end of this lesson, students will be able to use the "rise over run" formula to find the slope of a line.

#### Clicker question ideas:

Select the correct formula for the slope of a line.

A. Rise - Run

B. Rise + Run

C. Rise \* Run

D. Rise / Run

#### Exit card ideas:

Present students with the graph of a line, with two points labeled with their x- and y-coordinates. Ask students to compute the slope on their exit card.

#### Other ideas:

Compute the slope of a line from two supplied points. After one minute, check your answer with a partner. One group will be asked to share their answer with the class.

## **Summative Assessment**

By the end of this course, students will be able to create linear graphs from an equation.

#### Project ideas:

Create a portfolio of 5 artistic graphs that you can make on a graphing calculator. Record the equations you used to make the graphs.

#### Exam question ideas:

Using the supplied graph paper, plot the following line: y = (-2)x + 3.

#### Other ideas:

On an exam, ask students to draw the graph of a line with a slope of 1 and an x-intercept of 5.

Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to identify all components of the water cycle.

#### Clicker question ideas:

Select which component is NOT in the water cycle.

A. Evaporation

B. Perspiration

C. Condensation

D. Precipitation

#### Exit card ideas:

Ask students to list the components of the water cycle that they remember from class that day.

#### Other ideas:

In an after-class Canvas quiz, ask students to identify the component of the water cycle would be impacted by increased atmospheric temperature due to climate change.

## Summative Assessment

By the end of this course, students will be able identify how a change in one component of the water cycle will affect the whole system.

#### Project ideas:

Create a diagram of the water cycle, including at least four stages. Use arrows to show how water moves through the cycle.

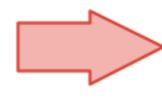
#### Exam question ideas:

Ask students to identify the component of the water cycle would be impacted by increased atmospheric temperature due to climate change, and justify their answer.

#### Other ideas:

In an exam, ask students to describe how an extended drought would impact the amount of surface runoff and infiltration that would occur at the next rain. Put the red arrows next to the assessments that do not align with the learning outcome.





By the end of this lesson, students will be able to describe how Thomson developed the "plum pudding" atomic model.

## Clicker question ideas:

To test the properties of atomic particles,
Thomson placed two plates of the SAME
electric charge around the cathode ray
A. True
B. False

#### Exit card ideas:

Sketch Thomson's "plum pudding" atomic model, and label all parts of your drawing.

#### Other ideas:

On an exit card, sketch Thomson's cathode ray tube experimental setup. Include the behavior of the cathode ray that led Thomson to conclude that there were electrons in the atom.

## **Summative Assessment**

By the end of this course, students will be able to identify the five main atomic models developed since 1800.

#### Project ideas:

Select one of the five major atomic models and create a 3D representation of the model for a Carbon atom.

#### Exam question ideas:

Match the name of the atomic model to the corresponding sketch.

#### Other ideas:

In a take-home exam, ask students to list the five main atomic models, including the new development that each model contributed to scientific knowledge. Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to identify important milestones in the Civil Rights Movement and in the Cold War during the 1950s and 1960s.

#### Clicker question ideas:

Which of these court cases desegregated US public schools?

- A. Brown vs. Board of Education
- B. Brown vs. Louisiana
- C. Bates vs. Little Rock

#### Exit card ideas:

List at least one supreme court case that, while focused on civil rights, referenced Soviet "propaganda mills" in the decision.

#### Other ideas:

Design a large poster that represents the timeline of at least four key milestones during the Civil Rights Movement and Cold War. Prepare a corresponding 15 minute presentation of your timeline.

## **Summative Assessment**

By the end of this course, students will be able to analyze the points of view of primary sources from the Civil Rights Movement and Cold War period.

#### Project ideas:

Read the provided amicus brief. Do you think the author views the Brown vs. Board case as a cause or effect in relation to the US's actions in the Cold War? Explain your position in 500 words.

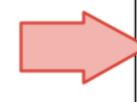
#### Exam question ideas:

Name the Supreme Court justice in Brown vs. Board who is related to the lone dissenter in Plessy vs. Ferguson.

#### Other ideas:

In a take-home exam, ask students to read "Labor Day Weekend at Communist Training School". In 500 words, describe why you think this article was published and whose point of view is missing. Put the red arrows next to the assessments that do not align with the learning outcome.





By the end of this lesson, students will be able to compute the mean, median, and mode of a given data set.

## Clicker question ideas:

Provide students with a dataset with 10 observations. Ask them to select which quantity is larger, the mean or the median.

A. Mean

B. Median

#### Exit card ideas:

Write down the formula to find the mean of a dataset.

#### Other ideas:

Provide students with an ordered dataset. Ask them to find the mode, and enter their answer anonymously on Poll Everywhere.

## Summative Assessment

By the end of this course, students will be able to evaluate which measure of central tendency is most appropriate for a given data set and research question.

#### Project ideas:

Give students a dataset of US incomes. Ask them to compute either the mean or the median and justify why their chosen measure is best to describe the income of an "average" American family.

#### Exam question ideas:

You are a banker with lots of small accounts and one very large account. You want to show off the amount of money you manage. Which metric should you provide?

A. Mean

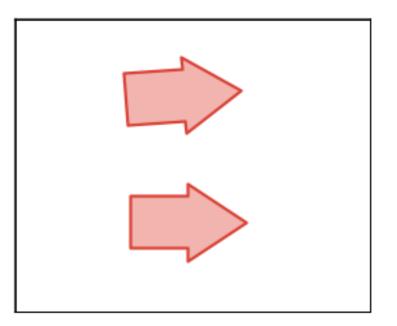
B. Median

C. Mode

#### Other ideas:

Use a clicker question to ask students whether the mean or median will be larger, based on a histogram of US incomes.

Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to introduce themselves in Spanish.

## Clicker question ideas:

Which statement would you use to introduce yourself in Spanish?

A. Me gusta \_\_\_\_. B. Je suis \_\_\_\_.

C. Me llamo \_\_\_\_. D. Soy \_\_\_\_.

#### Exit card ideas:

Write down the part of the lesson that you found most challenging today.

#### Other ideas:

Ask students to find a partner and introduce themselves to one another in Spanish.

## Summative Assessment

By the end of this course, students will be able to talk and write about future plans in Spanish.

#### Project ideas:

Read an essay in Spanish and highlight all the sentences that are written in future tense.

#### Exam question ideas:

Translate the following sentence into Spanish:

"I will go swimming tomorrow".

#### Other ideas:

In an oral exam, ask students to describe one goal they have for next year.

Put the red arrows next to the assessments that do **not** align with the learning outcome.





By the end of this lesson, students will be able to identify the structure of a Haiku.

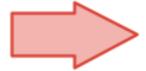
## Clicker question ideas:

Which poem structure matches that of a haiku?

- A. 3 lines, with 5, 7, and 5 syllables per line
- B. 4 lines, with 5, 7, 5, and 7 syllables per line
- C. 3 rhyming lines, each with 5 syllables

#### Exit card ideas:

Project three poems for students to read, and ask them to write the name of the poem that is a haiku on their exit card.



#### Other ideas:

For a quick homework assignment, ask students to compose a haiku poem before the next class.

Do it during class instead? Identify, not create

## Summative Assessment

By the end of this course, students will be able to effectively use similes and metaphors in their own compositions.

## Project ideas:

Write a freeverse poem on a topic of your choice, including at least one simile and one metaphor. Evaluate your own work by explaining what you think are the strengths and weaknesses of your poem.



#### Exam question ideas:

Read the following poem and highlight any similes you see.

This is for identifying, not creating
Revision: read the following passage and revise by adding
effective similies and metaphors

#### Other ideas:

Create a song, speech, or poem where you use at least one simile and one metaphor and recite it in front of the class.

Put the red arrows next to the assessments that do not align with the learning outcome.

assessment you selected is not well-aligned with the learning outcome.

By the end of this course, students will be able to identify the scientific and common names of major animal agriculture species in New York.

#### Clicker question ideas:

Which of these is the scientific name for a Holstein Cow?

- A. Bos taurus
- B. Bos aries
- C. Bos pisces

#### Exit card ideas:

Write down the common name and scientific name of one animal used for agriculture in New York State.

#### Other ideas:

Work with a partner to create a song that helps you remember the scientific names for pigs, sheep, and chickens. Perform it in front of the class. Songs with accompanying dances receive bonus points.

## **Summative Assessment**

By the end of this course, students will be able to explain domestication and its contributions to animal agriculture.

#### Project ideas:

Create a poster that showcases at least one benefit and one downside for agriculture of domesticating an animal of your choice. Be sure to include a definition of domestication in your display.

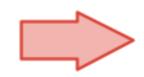
#### Exam question ideas:

Write the definition of domestication.

#### Other ideas:

Pick a major agricultural species and write an essay describing the 1) process of the species' domestication and 2) one contribution to agriculture that this species' domestication made. Put the red arrows next to the assessments that do not align with the learning outcome.





By the end of this lesson, students will be able to describe the process of printmaking.

#### Clicker question ideas:

Select the appropriate order of the steps of printmaking.

- A. Draw, carve, ink, stamp
- B. Carve, ink, stamp, draw
- C. Draw, ink, carve, stamp

#### Exit card ideas:

When print making, should you carve out the negative space or the positive space of your design?

#### Other ideas:

On an exit card, write your initial impressions when you see the print displayed on the screen.



## Summative Assessment

By the end of this unit, students will be able to create original objects of art using ceramic.

## Project ideas:

Create a flower pot in the shape of an animal of your choice using clay.

#### Exam question ideas:

Describe how the development of ceramics helped early civilizations thrive.



#### Other ideas:

Use a throwing wheel to create a ceramic mug. Glaze and design in the style of your choosing.

Put the red arrows next to the assessments that do not align with the learning outcome.

## Formative Assessment

By the end of this lesson, students will be able to describe the development of "Theory of Mind" in children.

#### Clicker question ideas:

Which psychologist(s) developed the "Theory of Mind"?

- A. Premack & Woodruff
- B. Piaget
- C. Erikson & Freud

#### Exit card ideas:

List a task that helps scientists detect development of "Theory of Mind" (ToM). Describe what a child who has and has not developed ToM might do in the task.

#### Other ideas:

Write down what you think ToM is and one step that helps children develop it. After 1 minute, share your answer with a partner and work together to refine your answers. Be prepared to share with the class.

## **Summative Assessment**

By the end of this course, students will be able to evaluate how current research supports and critiques major theories of child development.

## Project ideas:

Read the provided research article.

Describe one research finding from the article that supports Bowlby's Attachment Theory and one that critiques it.

#### Exam question ideas:

A recent study found that children often swipe on all screens (TV, phone, etc.) at electronics stores despite not being told or taught to do so. How would Badura use Social Learning Theory to explain this?

#### Other ideas:

Develop a proposal for a research study that you could use to evaluate whether children in a preschool class have developed Theory of Mind or not.

Put the red arrows next to the assessments that do not align with the learning outcome.

## Formative Assessment

By the end of this lesson, students will be able to use the "rise over run" formula to find the slope of a line.

## Clicker question ideas:

Select the correct formula for the slope of a line.

A. Rise - Run

B. Rise + Run

C. Rise \* Run

D. Rise / Run

#### Exit card ideas:

Present students with the graph of a line, with two points labeled with their x- and y-coordinates. Ask students to compute the slope on their exit card.

#### Other ideas:

Compute the slope of a line from two supplied points. After one minute, check your answer with a partner. One group will be asked to share their answer with the class.

## **Summative Assessment**

By the end of this course, students will be able to create linear graphs from an equation.

## Project ideas:

Create a portfolio of 5 artistic graphs that you can make on a graphing calculator. Record the equations you used to make the graphs.

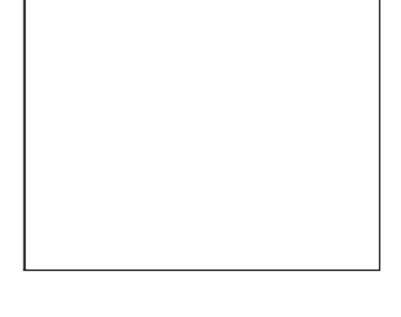
#### Exam question ideas:

Using the supplied graph paper, plot the following line: y = (-2)x + 3.

#### Other ideas:

On an exam, ask students to draw the graph of a line with a slope of 1 and an x-intercept of 5.

Put the red arrows next to the assessments that do not align with the learning outcome.



## Formative Assessment

By the end of this lesson, students will be able to identify all components of the water cycle.

## Clicker question ideas:

Select which component is NOT in the water cycle.

A. Evaporation

B. Perspiration

C. Condensation

D. Precipitation

#### Exit card ideas:

Ask students to list the components of the water cycle that they remember from class that day.

#### Other ideas:

In an after-class Canvas quiz, ask students to identify the component of the water cycle would be impacted by increased atmospheric temperature due to climate change.

## **Summative Assessment**

By the end of this course, students will be able identify how a change in one component of the water cycle will affect the whole system.

#### Project ideas:

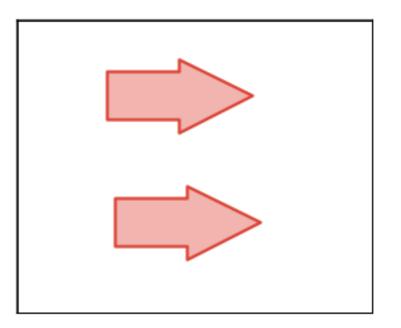
Create a diagram of the water cycle, including at least four stages. Use arrows to show how water moves through the cycle.

#### Exam question ideas:

Ask students to identify the component of the water cycle would be impacted by increased atmospheric temperature due to climate change, and justify their answer.

#### Other ideas:

In an exam, ask students to describe how an extended drought would impact the amount of surface runoff and infiltration that would occur at the next rain. Put the red arrows next to the assessments that do not align with the learning outcome.



## Formative Assessment

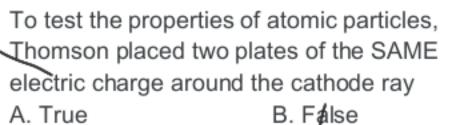
**Summative Assessment** 

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By the end of this course, students will be able to identify the five main atomic models developed since 1800.

By the end of this lesson, students will be able to describe how Thomson developed the "plum pudding" atomic model.

## Clicker question ideas:

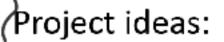


### Exit card ideas:

Sketch Thomson's "plum pudding" atomic model, and label all parts of your drawing.

#### Other ideas:

On an exit card, sketch homson's cathode ray tube experimental setup. Include the behavior of the cathode ray that led Thomson to conclude that there were electrons in the atom.



Select one of the five major atomic models and create a 3D representation of the model for a Carbon atom.

## Exam question ideas:

Match the name of the atomic model to the corresponding sketch.

#### Other ideas:

In a take-home exam, ask students to list the five main atomic models, including the new development that each model contributed to scientific knowledge.

Put the red arrows next to the assessments that do not align with the learning outcome.

Discuss why the assessment you selected is not well-aligned with the learning outcome.

Topic information: https://medium.com/@Intlink.edu/a-timeline-of-atomic-models-cb2607b1da85

## Formative Assessment

By the end of this lesson, students will be able to identify important milestones in the Civil Rights Movement and in the Cold War during the 1950s and 1960s.

#### Clicker question ideas:

Which of these court cases desegregated US public schools?

- A. Brown vs. Board of Education
- B. Brown vs. Louisiana
- C. Bates vs. Little Rock

#### Exit card ideas:

List at least one supreme court case that, while focused on civil rights, referenced Soviet "propaganda mills" in the decision.

#### Other ideas:

Design a large poster that represents the timeline of at least four key milestones during the Civil Rights Movement and Cold War. Prepare a corresponding 15 minute presentation of your timeline.

## **Summative Assessment**

By the end of this course, students will be able to analyze the points of view of primary sources from the Civil Rights Movement and Cold War period.

#### Project ideas:

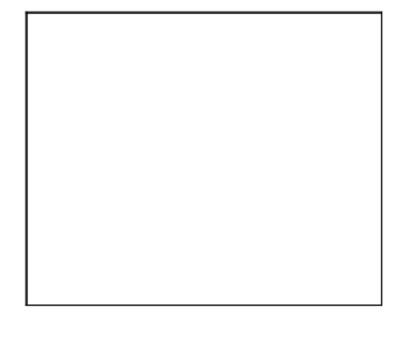
Read the provided amicus brief. Do you think the author views the Brown vs. Board case as a cause or effect in relation to the US's actions in the Cold War? Explain your position in 500 words.

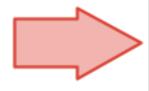
#### Exam question ideas:

Name the Supreme Court justice in Brown vs. Board who is related to the lone dissenter in Plessy vs. Ferguson.

#### Other ideas:

In a take-home exam, ask students to read "Labor Day Weekend at Communist Training School". In 500 words, describe why you think this article was published and whose point of view is missing. Put the red arrows next to the assessments that do not align with the learning outcome.





## Formative Assessment

By the end of this lesson, students will be able to compute the mean, median, and mode of a given data set.

#### Clicker question ideas:

Provide students with a dataset with 10 observations. Ask them to select which quantity is larger, the mean or the median.

A. Mean

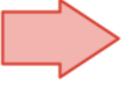
B. Median

#### Exit card ideas:

Write down the formula to find the mean of a dataset.

#### Other ideas:

Provide students with an ordered dataset. Ask them to find the mode, and enter their answer anonymously on Poll Everywhere.



## **Summative Assessment**

By the end of this course, students will be able to evaluate which measure of central tendency is most appropriate for a given data set and research question.

#### Project ideas:

Give students a dataset of US incomes. Ask them to compute either the mean or the median and justify why their chosen measure is best to describe the income of an "average" American family.

#### Exam question ideas:

You are a banker with lots of small accounts and one very large account. You want to show off the amount of money you manage. Which metric should you provide?

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#### Other ideas:

Use a clicker question to ask students whether the mean or median will be larger, based on a histogram of US incomes.

Put the red arrows next to the assessments that do not align with the learning outcome.



## Formative Assessment

By the end of this lesson, students will be able to introduce themselves in Spanish.

## Clicker question ideas:

Which statement would you use to introduce yourself in Spanish?

A. Me gusta \_\_\_\_. B. Je suis \_\_\_\_.

C. Me llamo \_\_\_\_. D. Soy \_\_\_\_.

#### Exit card ideas:

Write down the part of the lesson that you found most challenging today.

#### Other ideas:

Ask students to find a partner and introduce themselves to one another in Spanish.

## Summative Assessment

By the end of this course, students will be able to talk and write about future plans in Spanish.

## Project ideas:

Read an essay in Spanish and highlight all the sentences that are written in future tense.

#### Exam question ideas:

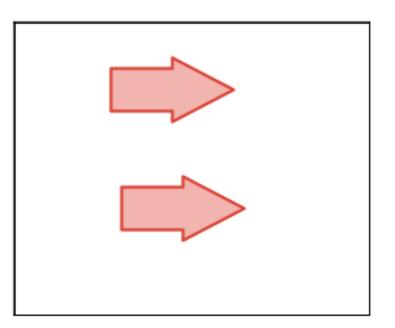
Translate the following sentence into Spanish:

"I will go swimming tomorrow".

#### Other ideas:

In an oral exam, ask students to describe one goal they have for next year.

Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to identify the structure of a Haiku.

#### Clicker question ideas:

Which poem structure matches that of a haiku?

- A. 3 lines, with 5, 7, and 5 syllables per line
- B. 4 lines, with 5, 7, 5, and 7 syllables per line
- C. 3 rhyming lines, each with 5 syllables

#### Exit card ideas:

Project three poems for students to read, and ask them to write the name of the poem that is a haiku on their exit card.

#### Other ideas:

For a quick homework assignment, ask students to compose a haiku poem before the next class.

## **Summative Assessment**

By the end of this course, students will be able to effectively use similes and metaphors in their own compositions.

#### Project ideas:

Write a freeverse poem on a topic of your choice, including at least one simile and one metaphor. Evaluate your own work by explaining what you think are the strengths and weaknesses of your poem.

#### Exam question ideas:

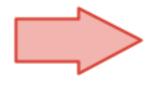
Read the following poem and highlight any similes you see.

#### Other ideas:

Create a song, speech, or poem where you use at least one simile and one metaphor and recite it in front of the class.

Put the red arrows next to the assessments that do not align with the learning outcome.





By the end of this course, students will be able to identify the scientific and common names of major animal agriculture species in New York.

## Clicker question ideas:

Which of these is the scientific name for a Holstein Cow?

- A. Bos taurus
- B. Bos aries
- C. Bos pisces

#### Exit card ideas:

Write down the common name and scientific name of one animal used for agriculture in New York State.

#### Other ideas:

Work with a partner to create a song that helps you remember the scientific names for pigs, sheep, and chickens. Perform it in front of the class. Songs with accompanying dances receive bonus points.

## **Summative Assessment**

By the end of this course, students will be able to explain domestication and its contributions to animal agriculture.

#### Project ideas:

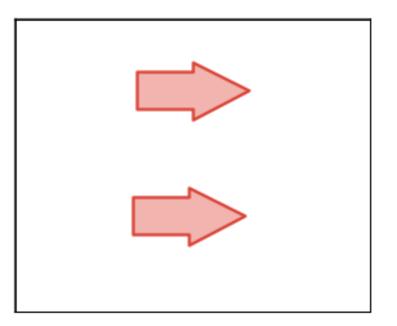
Create a poster that showcases at least one benefit and one downside for agriculture of domesticating an animal of your choice. Be sure to include a definition of domestication in your display.

#### Exam question ideas:

Write the definition of domestication.

#### Other ideas:

Pick a major agricultural species and write an essay describing the 1) process of the species' domestication and 2) one contribution to agriculture that this species' domestication made. Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to describe the process of printmaking.

#### Clicker question ideas:

Select the appropriate order of the steps of printmaking.

- A. Draw, carve, ink, stamp
- B. Carve, ink, stamp, draw
- C. Draw, ink, carve, stamp

#### Exit card ideas:

When print making, should you carve out the negative space or the positive space of your design?

#### Other ideas:

On an exit card, write your initial impressions when you see the print displayed on the screen.

## **Summative Assessment**

By the end of this unit, students will be able to create original objects of art using ceramic.

## Project ideas:

Create a flower pot in the shape of an animal of your choice using clay.

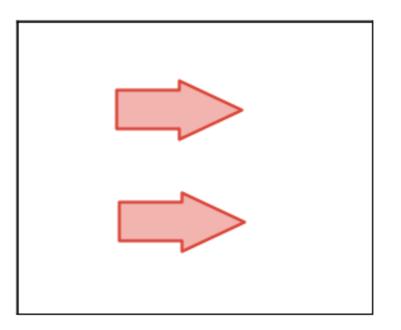
#### Exam question ideas:

Describe how the development of ceramics helped early civilizations thrive.

#### Other ideas:

Use a throwing wheel to create a ceramic mug. Glaze and design in the style of your choosing.

Put the red arrows next to the assessments that do not align with the learning outcome.



By the end of this lesson, students will be able to describe the development of "Theory of Mind" in children.

#### Clicker question ideas:

Which psychologist(s) developed the "Theory of Mind"?

- A. Premack & Woodruff
- B. Piaget
- C. Erikson & Freud

#### Exit card ideas:

List a task that helps scientists detect development of "Theory of Mind" (ToM). Describe what a child who has and has not developed ToM might do in the task.

#### Other ideas:

Write down what you think ToM is and one step that helps children develop it. After 1 minute, share your answer with a partner and work together to refine your answers. Be prepared to share with the class.

## Summative Assessment

By the end of this course, students will be able to evaluate how current research supports and critiques major theories of child development.

## Project ideas:

Read the provided research article.

Describe one research finding from the article that supports Bowlby's Attachment Theory and one that critiques it.

#### Exam question ideas:

A recent study found that children often swipe on all screens (TV, phone, etc.) at electronics stores despite not being told or taught to do so. How would Badura use Social Learning Theory to explain this?

#### Other ideas:

Develop a proposal for a research study that you could use to evaluate whether children in a preschool class have developed Theory of Mind or not.

Put the red arrows next to the assessments that do not align with the learning outcome.

