

**HAPPY NEW YEAR!!!!**

**GO TO THE FOLLOWING WEBSITE ON YOUR  
SMART PHONE, TABLET OR LAPTOP**

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 **KAHOOT.IT**

# **TURN & TALK...REPORT OUT**

**TURN & TALK, COME TO A CONSENSUS ON A TYPE OF FORMATIVE ASSESSMENT THAT YOU USE SUCCESSFULLY. IN FIVE MINUTES, YOU WILL SHARE WITH THE GROUP.**

# **FORMATIVE ASSESSMENTS**

**TO DRIVE INSTRUCTION**

**QHS STYLE!!**



# TO START CLASS . . .

## BELLRINGERS

- ALWAYS WRITING
- SOMETIMES KINESTHETIC
- USUALLY COLLABORATIVE
- CONCEPTUAL
- RELEVANT TO DAILY LIFE
- DISCREPANT EVENTS
- GETTING THE "JOKE"

# ALWAYS WRITING

THINK ABOUT A MOVIE YOU HAVE SEEN THAT HAS HAD "SCIENCE"  
INCORPORATED INTO THE STORY. (DESCRIBE THE MOVIE YOU ARE THINKING  
ABOUT)

- WAS THE "SCIENCE" REAL? OR WAS IT SCIENCE FICTION?
- PROVIDE EVIDENCE TO SUPPORT YOUR CLAIM!!! (TIER 2 WORDS)

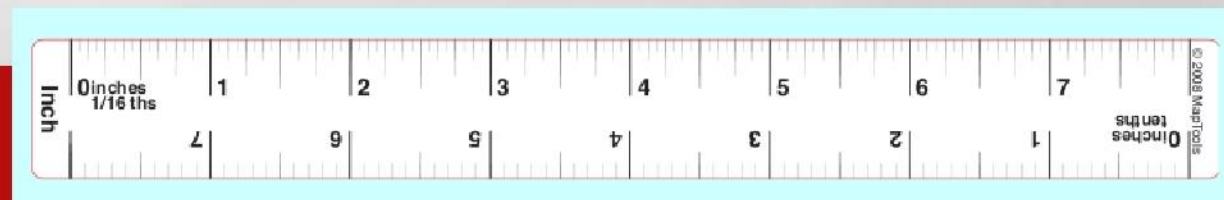
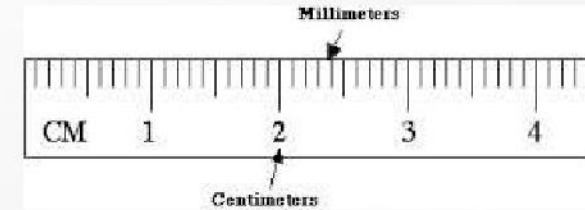


# KINESTHETIC

**CALL OUT DIFFERENT MEASUREMENTS AND STUDENTS HOLD UP PICTURES OF THE MEASUREMENT TOOL TO USE.**

**FOR EXAMPLE:**

**2.54 ML OF WATER, 50.0 G**



# KINESTHETIC

- **MAKE SURE YOU HAVE RECEIVED A NOTE CARD AS YOU WALKED IN.**
- **CLASSIFY YOURSELF AS EITHER A **PHYSICAL** PROPERTY OR A **CHEMICAL** PROPERTY BY STANDING NEXT TO THE CORRECT LABEL.**
- **AS A GROUP, COME TO A CONSENSUS.**
- **BE READY TO SUPPORT YOUR CLAIM!!**

# **COLLABORATIVE, INTRODUCTION**

- **BE SURE I GAVE YOU YOUR CARD WHEN YOU ENTERED (THE CARD HAS AN ELEMENT ON IT).**
- **USING THE CLUE ON THE CARD YOU WERE GIVEN (AND ANY RESOURCES IN THE ROOM) TO FIND YOUR ASSIGNED SEAT.**
- **THE CLASS WHO GETS IT 100% CORRECT THE FASTEST WILL WIN  
A PRIZE!!**



# CONCEPTUAL, MATHEMATICAL REASONING

WHICH OF THE FOLLOWING OBJECTS WOULD HAVE A DIAMETER CLOSEST TO

$1.2742 \times 10^7$  METERS?

- A BASKETBALL
- LAKE TAHOE ● THE EARTH

WHAT REASONING DID YOU USE TO COME TO YOUR CONCLUSION? **(EXPLAIN PLEASE!)**

# CONCEPTUAL, APPROPRIATE EVIDENCE

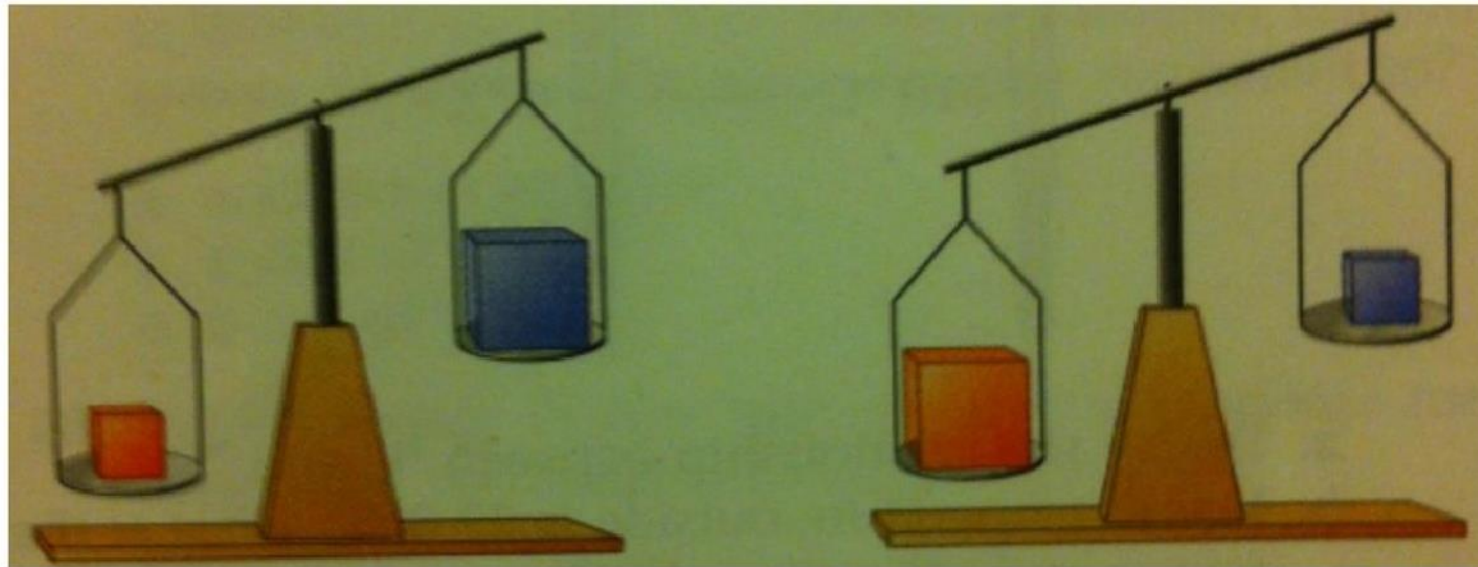
**WHEN A MARBLE IS DROPPED INTO A BEAKER OF WATER, IT SINKS TO THE BOTTOM. WHICH OF THE FOLLOWING IS THE BEST EXPLANATION?**

- a. THE SURFACE AREA OF THE MARBLE IS NOT LARGE ENOUGH FOR THE MARBLE TO BE HELD UP BY THE SURFACE TENSION OF WATER.**
- b. THE MASS OF THE MARBLE IS GREATER THAN THAT OF THE WATER.**
- c. THE MARBLE WEIGHS MORE THAN AN EQUIVALENT VOLUME OF THE WATER.**
- d. THE FORCE FROM DROPPING THE MARBLE BREAKS THE SURFACE TENSION OF THE WATER. THE MARBLE HAS**
- e. GREATER MASS AND VOLUME THAN THE WATER.**

**JUSTIFY THE ANSWER YOU PICK IN AT LEAST ONE COMPLETE SENTENCE.**

# CONCEPTUAL VISUALIZATION & REASONING

For each of the following figures decide which block is more dense: the light block or the dark block, or it cannot be determined (The darkest block is on the right in each scale). Explain your answers.



# CONCEPTUAL DEMONSTRATION CHALLENGE

- **LOOK AT THE BOTTLE WITH 2 SETS OF BEADS FLOATING IN THE CENTER. WHAT WOULD HAPPEN IF YOU SHAKE IT?**
- **SHAKE THE BOTTLE WITH 2 SETS OF BEADS FLOATING IN THE CENTER. WHAT DOES HAPPEN?**
- **WHY? MAKE A CLAIM AND SUPPORT IT WITH EVIDENCE.**







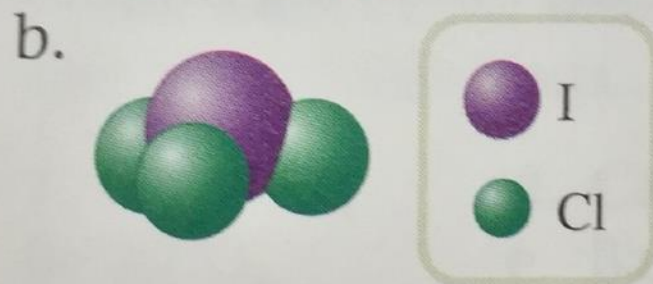
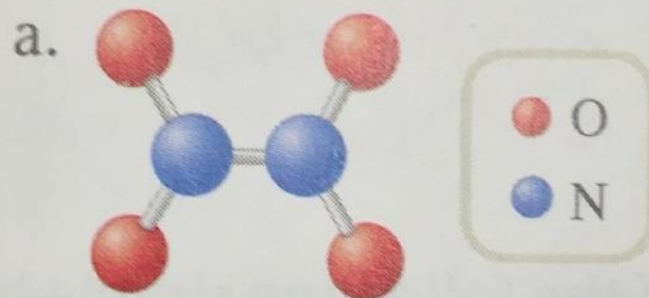
# EXPLAINING A SCIENTIFIC JOKE:

EXPLAIN WHY STEW'S SHIRT IS SCIENTIFICALLY CORRECT: TECHNICALLY ALCOHOL IS A SOLUTION. —

- 1) DO NOT YELL OUT ANSWERS. NO POINTS IF YOU DO.**
- 2) YOUR ANSWER MUST HAVE THE FOLLOWING DEFINED & BE PRECISELY CORRECT: PURE SUBSTANCE, MIXTURE, SOLUTION. YOU MUST USE THOSE DEFINITIONS TO DEMONSTRATE WHY STEW'S SHIRT IS CORRECT SCIENTIFICALLY.**
- 3) WRITE YOUR ANSWER IN PARAGRAPH FORM ON A HALF SHEET OF PAPER (EVERYONE AT THE TABLE CONTRIBUTES).**
- 4) FIRST GROUP FINISHED GETS FIRST CHANCE AT POINTS. IF NOT COMPLETELY CORRECT, IT GETS RETURNED & THE GAME IS STILL ON.**
- 5) NO PHONES. PHONES MUST BE IN THE PHONE BOX.**

# VISUALIZATION OF NOMENCLATURE

7. Name each of the following compounds.



c.  $\text{SO}_5$

d.  $\text{P}_2\text{S}_5$

# DAILY LIFE IN SLOW MOTION AS A HOOK

**"The whole of science is nothing more than a refinement of everyday thinking."**

**Albert Einstein**

**How does popcorn pop?**



# **DISCREPANT EVENT FROM DAILY LIFE:**

**I HAVE A MAGNET THAT WEIGHS 8.63 GRAMS. I HAVE A 50 ML GRADUATED CYLINDER FILLED TO THE MARK WITH 50 ML OF WATER (ALSO 50 GRAMS OF WATER). WILL THE MAGNET SINK OR FLOAT? MAKE A CLAIM. SUPPORT IT WITH AN EXAMPLE OR TWO FROM YOUR DAILY LIFE.**



# HOW TO SEE WHAT CANNOT BE SEEN:

**BELL RINGER: HOW COULD YOU COUNT THE MOLECULES IN A DRINK OF WATER? WHAT WOULD YOU NEED? LIST EVERYTHING.**

## **CALCULATIONS TABLE:**

**MASS OF DRINK OF WATER:**

\_\_\_\_\_

**MASS IN 1 MOLE OF WATER:**

\_\_\_\_\_

**MOLES IN DRINK OF WATER:**

\_\_\_\_\_

**MOLECULES IN 1 MOLE OF WATER:**

\_\_\_\_\_

**MOLECULES IN DRINK OF WATER:**

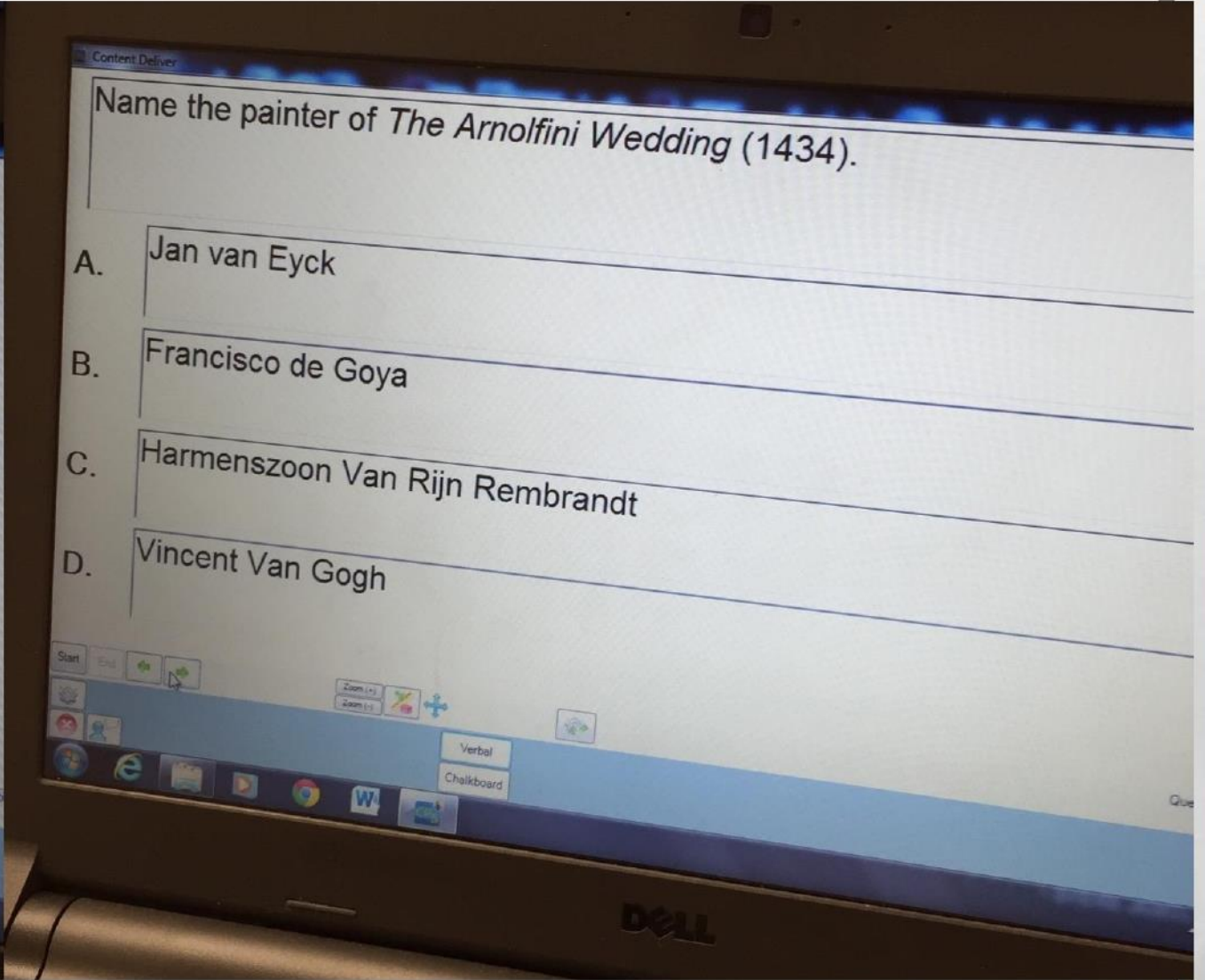
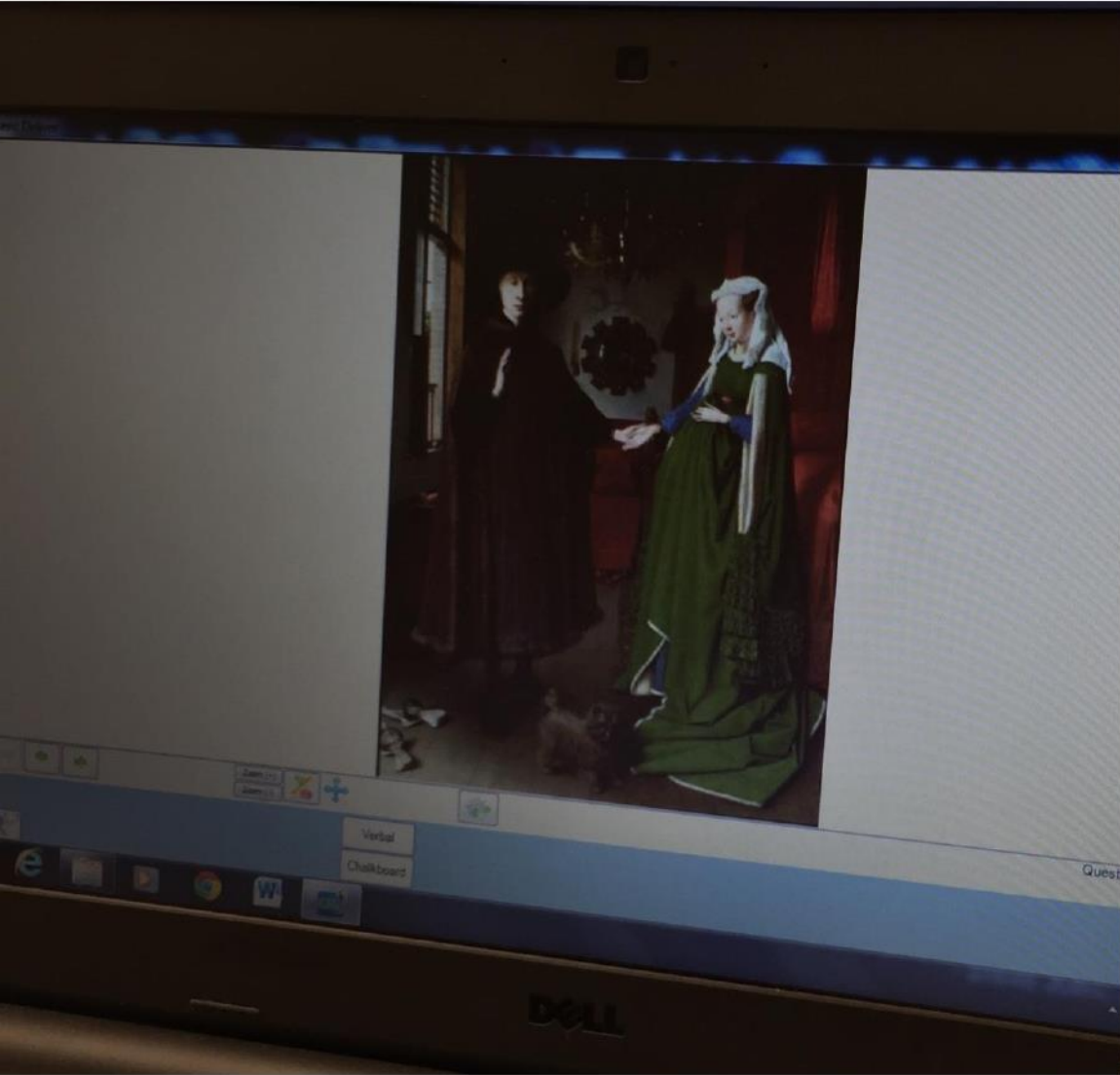
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# **DURING CLASS . . .**

- **E-RESPONDERS**
- **WHITE BOARDS**
- **CLASSROOM FEUD-POWER POINT**
- **PENCIL/PAPER QUIZ**
- **KINESTHETIC CHALLENGES (STOICHIOMETRY CHALLENGE)**
- **JEOPARDY GAME-MAKER**

# E-RESPONDERS





# Picasso

A. 1937



B. 1863



C. 1656



Question #31 - Artists - NAQT 1



Identify this novel

- |    |                   |    |                     |
|----|-------------------|----|---------------------|
| A. | Pride & Prejudice | B. | Jane Eyre           |
| C. | Wuthering Heights | D. | Sense & Sensibility |

Trouble brews when wealthy young English bachelors, Bingley and Darcy, move into the village of Meryton. Darcy proposes to Elizabeth and she refuses because he is a pompous English ass.





# CLASSROOM FEUD

They love the buzzers!!!





# KINESTHETIC STOICH CHALLENGE



# JEOPARDY GAME MAKER

- [HTTP://WWW.SUPERTEACHERTOOLS.US/JEOPARDYX/](http://www.superteachertools.us/jeopardyx/)

**THE NEW AND IMPROVED VERSION OF THE JEOPARDY REVIEW GAME INCLUDES THE FOLLOWING FEATURES:**

- **SIMPLE INSERTION OF PICTURES ON QUESTION AND/OR ANSWER SLIDES**
- **FULL SUPPORT FOR SYMBOLS, SUCH AS EXPONENTS AND WINGDINGS STYLE FONTS**
- **BETTER SUPPORT FOR FOREIGN LANGUAGE QUESTION AND/OR ANSWER SLIDES**
- **SIMPLER VISUAL EDITING PROCESS**
- **EMBED ANYTHING IN YOUR QUESTION SLIDES, EVEN YOUTUBE VIDEOS, FLASH OBJECTS, ETC.**
- **SIMPLE SCOREKEEPING SYSTEM**
- **WORKS ON PORTABLE DEVICES SUCH AS SMARTPHONES, IPAD, AND IPOD TOUCH!**

# END OF CLASS

## EXIT SLIP

- THINGS I LEARNED TODAY
- THINGS I FOUND INTERESTING
- QUESTIONS I STILL HAVE

DOODLE IT

WRITE ABOUT IT

**KAHOOT.IT**

**POLLEVERYWHERE.COM**

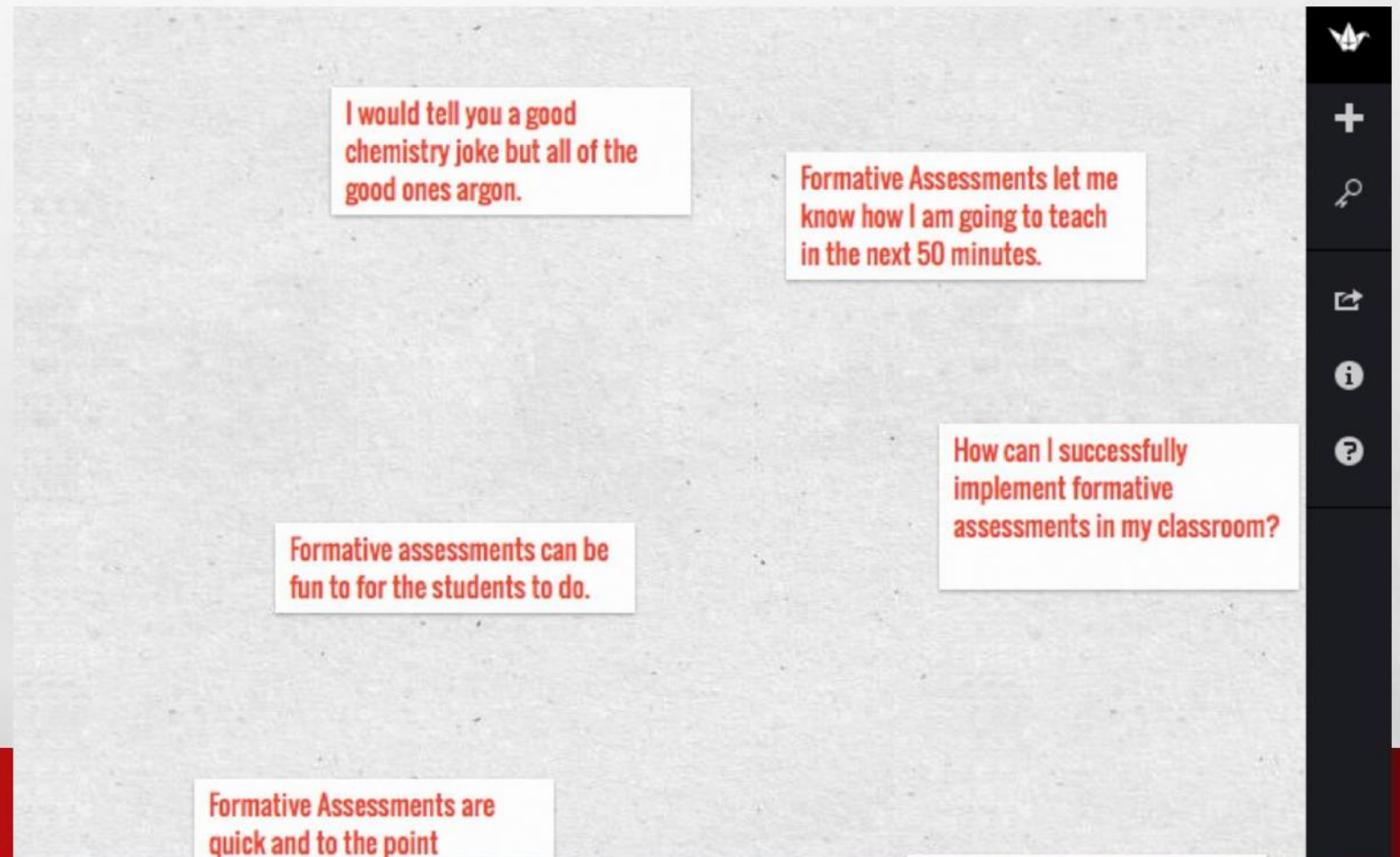
**CORK BOARD**

**TWITTER BOARD**



# CORK BOARD

● [HTTPS://PADLET.COM/](https://padlet.com/)



# **POLLEVERYWHERE.COM**

- **YOU CREATE A POLL AT POLLEVERYWHERE.COM**
- **YOU OPEN THE POLL YOU CREATED IN CLASS**
- **STUDENTS USE THEIR PHONES TO TEXT A NUMBER WITH THEIR ANSWER**
- **IT SHOWS LIVE RESULTS**



# **USE KAHOOT.IT FOR QUIZZES TOO!**

- **CAN USE VIDEO**
- **CAN USE IMAGES**
- **CAN MAKE A FUN EXIT TICKET**
- **GO TO KAHOOT.IT ON YOUR PHONE, LAPTOP OR TABLET!**

# RESOURCES

- [HTTP://WWW.EDUTOPIA.ORG/GROUPS/ASSESSMENT/250941](http://www.edutopia.org/groups/assessment/250941) (GIVES 56 EXAMPLES)
- [HTTPS://WVDE.STATE.WV.US/TEACH21/EXAMPLESOFFORMATIVEASSESSMENT.HTML](https://wvde.state.wv.us/teach21/examplesofformativeassessment.html)
- [HTTPS://GLOBALDIGITALCITIZEN.ORG/12-AWESOME-FORMATIVE-ASSESSMENT-EXAMPLES](https://globaldigitalcitizen.org/12-awesome-formative-assessment-examples)
- [HTTP://WWW.SUPERTEACHERTOOLS.US/JEOPARDYX/](http://www.superteachertools.us/jeopardyx/)
- [HTTPS://GETKAHOOT.COM/](https://getkahoot.com/)
- [HTTPS://KAHOOT.IT/#/](https://kahoot.it/#/) ●

[HTTPS://PADLET.COM/](https://padlet.com/)

- [HTTPS://WWW.POLLEVERYWHERE.COM/](https://www.polleverywhere.com/)