COLLABORATIVE LEARNING

WITH

BREAKOUT BOXES

A Breakout Box …

- is an interactive and engaging classroom activity that brings rigor and challenge to ordinary content.

- uses cooperative groups to problem solve, review learned material, or introduce new content.

- uses 21st century skills to push students to think "outside of the box."

What is a Breakout Box?
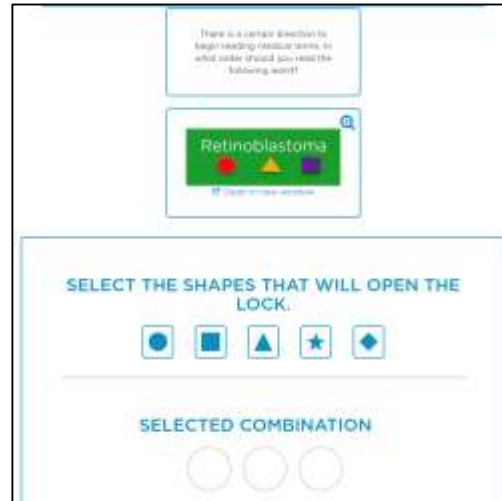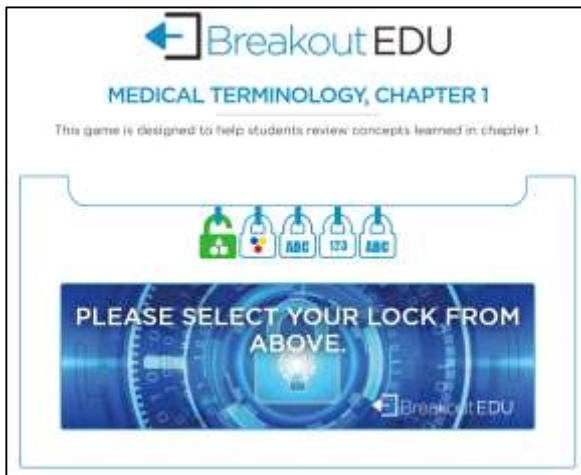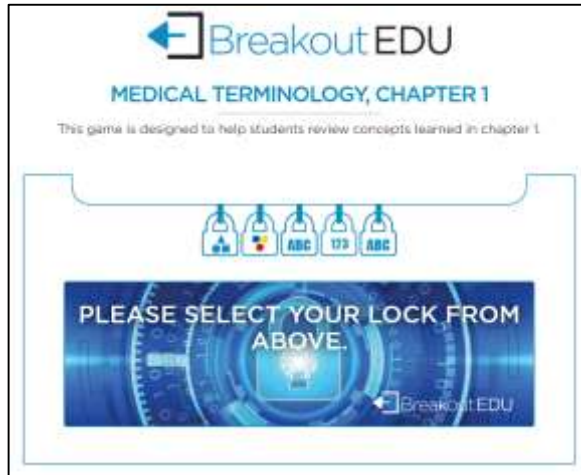
Mobile Escape Room

Two Kinds of Breakout Puzzles

1. **Physical Box**

- Students must use clues to solve puzzles to open locks on the outside of the box
- Completed in a group setting

2. **Digital Puzzles**

- Students work in Blackboard to solve the puzzles
- Completed in a whole class or individual setting

Digital Puzzles

- Digital puzzles may be completed whole group where the teacher and students work to solve the puzzles on the screen together.

- They may also be assigned in Blackboard for students to complete individually.

- Students work on one lock/puzzle at a time. When successfully completed, the lock will open and turn green.

- Digital puzzles can be graded via Blackboard. Students can submit their answers using the assignment feature, or they can submit a Word document with their answers.

YOUR TURN

LET'S WORK TOGETHER AS A GROUP TO COMPLETE THE DIGITAL BREAKOUT PUZZLE: SUMMER LOVIN'.

Traditional Box Puzzles

- Students will work in groups of 3 or 4 to uncover clues to solve printed puzzles.

- Each Breakout begins with an introductory story that will aquaint students with the topic and inform them of the end goal.

- As each puzzle is solved, the group will use the answer to the puzzle to open a lock.

- When all of the locks are off and the box is open, the activity has ended.

- Most puzzles include reflection questions for students to answer when finished. These may be content specific or related to how well the group worked together.

Traditional Box Locks

Key Lock

The key to this lock is hidden around the room. Students must search the room to find it. This is usually an easy puzzle for students to solve.

3 Digit Lock

This lock is set to a 3 digit number.

4 Digit Lock

This lock is set to a 4 digit number.

Word Lock

Shape Lock

Directional Lock

Color Lock

You may choose one of the locks listed above.

Word Lock

Shape Lock

Directional Lock

Color Lock

You may choose one of the locks listed above.

YOUR TURN

WORK WITH THE PEOPLE AT YOUR TABLE TO BREAK OUT. PUZZLES AND CLUES ARE LOCATED IN THE MANILA ENVELOPES.

Breakout Puzzles

- Breakout Puzzles come **pre-made**: Instructors would simply print the provided information from a Google file and watch a video to see how to set up the box/puzzle. Instructors would also have to set the locks for the puzzles before each use or import the digital puzzle into Blackboard.

- Breakout Puzzles can also be **made by you**: Instructors would need to pick out five or so important concepts from a chapter or unit of study to develop puzzles around. This group activity is used once or twice a semester to review before a midterm/final or to introduce a new concept. The Library has six Breakout Box Kits available for use.

How to Search for a Pre-Made Digital and/or Traditional Kit Puzzle

Step 1

- Visit www.breakoutedu.com

Step 2

- Click on Log In/Register near top right of screen

- Email: ?

- Password: ?

Step 3

- This takes you to a search screen where you may filter your search for the best results.

Steps to Download a Digital Puzzle to Blackboard

- Visit www.breakoutedu.com
- Log in:

    username: ?

    password: ?

- Select Digital Game.
- Click Copy. Wait about 5 seconds.
- Click View Copied Game.
- Copy and Paste Embed Code into Blackboard using HTML button.

How To Make Your Own Traditional Kit Puzzles

Supplies needed:

- Tackle box or Large tool box

- Smaller box that will fit into the Large box

- 5 different types of locks (key, 3-digit, 4-digit, word, color, directional, shape)

- Hasp

- Patience and Creativity!

How To Make Your Own Digital Puzzles

Supplies needed:

- Content questions

- Patience and Creativity!

Breakout Puzzle Examples by Type of Activity / Question

- **Process or Steps to Learn** – List steps in random order. Give each step a shape. Students must order **shapes** correctly.

- **Process or Steps to Learn** - Students must use a **number** to tell how many steps are involved in ___?

- **Process or Order** – List steps in random order. Give each step a number. Students must order **numbers** correctly.

- **Important words or definitions** – Scramble the directions to have students define or guess an important vocabulary **word**. (Ex. Iti syou rgo al t odef ine the w ord.)

- **Fill in the Blank Questions** – **Word** lock

- **Fill in the Blank Question with statement, "They add up, you know!"** – **Number** lock

- **Fill in the Blank Questions** – Word bank answers have shape word beside each. **Shape** lock used.

- **Fill in the paragraph** – Provide students with a paragraph from text. Leave blanks of important words/definitions. At bottom of paragraph provide words for blanks and number then 1 – 5. **Numbers** in correct order will open lock.

- **Direct questions** – **Word** lock

- **Direct question** – **Number** lock

- **Matching activity** – Color each statement (A-E) a different **color**.

- **Matching activity** – Assign each statement (A-E) a different **shape**

- **Matching activity** – Each statement (A-E) will be an answer. **Word** lock.

Breakout Puzzle Examples by Type of Activity/Question

- **True / False**– Provide students with a maze of 16 squares. Some of the information in squares is true, some is false. In 5 moves, students should go through the maze. The **directions** they move are their answers.

- **Picking out things with "like" qualities** – Maze activity, answers will be **directions**.

- **Labeling a diagram** – Provide diagram with parts or labels deleted. Also provide a word bank containing shapes/words. Answers will be in **shapes**.

- **Two categories of things** – 1 = first part, 2 = second part. **Number** lock used.

- **5 multiple choice questions** – Answers go with **word** lock

- **Chart of Information** – Color code parts of the chart. Students must fill in the blank by choosing the correct **color**.

Breakout Puzzle Examples by <u>Lock Type</u>

- **Word**
  - **Important words or definitions** – Scramble the directions to have students define or guess an important vocabulary **word**. (Ex. Iti syou rgo al t odef ine the w ord.)
  - **Fill in the Blank Questions** – **Word** lock
  - **Direct questions** – **Word** lock
  - **Matching activity** – Each statement (A-E) will be an answer. **Word** lock.

- **Shape**
  - **Process or Steps to Learn** – List steps in random order. Give each step a shape. Students must order **shapes** correctly.
  - **Fill in the Blank Questions** – Word bank answers have shape word beside each. **Shape** lock used.
  - **Matching activity** – Assign each statement (A-E) a different **shape**

- **Number**
  - **Process or Steps to Learn** - Students must use a **number** to tell how many steps are involved in ___?
  - **Process or Order** – List steps in random order. Give each step a number. Students must order **numbers** correctly.
  - **Fill in the Blank Question with statement, "They add up, you know!"** – **Number** lock
  - **Fill in the paragraph** – Provide students with a paragraph from text. Leave blanks of important words/definitions. At bottom of paragraph provide words for blanks and number then 1 – 5. **Numbers** in correct order will open lock.
  - **Direct question** – **Number** lock
  - **Two categories of things** – 1 = first part, 2 = second part. **Number** lock used.

Breakout Puzzle Examples by <u>Lock Type</u>

- **Directional**
  - **True / False**– Provide students with a maze of 16 squares. Some of the information in squares is true, some is false. In 5 moves, students should go through the maze. The **directions** they move are their answers.
  - **Picking out things with "like" qualities** – Maze activity, answers will be **directions**.

- **Color**
  - **Matching activity** – Color each statement (A-E) a different **color**.
  - **Chart of Information** – Color code parts of the chart. Students must fill in the blank by choosing the correct **color.**

What's Next?

Your Responsibilities:

- Think about concepts where students experience difficulty.

- Decide whether to use a digital or traditional puzzle.

- Search pre-made puzzles to see if there is a match.

- Develop content concepts to form puzzles around.

- Set up an appointment with me to discuss your thoughts/ideas and decide on date to present

My Responsibilities:

- Print / Make necessary materials and organize

- Set locks (usually takes 1 week to get physical boxes ready)

- Come to your class and help execute the activity

Contact Leslie Queen for help!

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