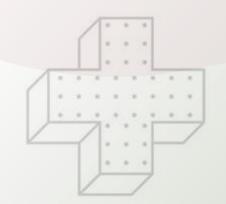
# The Great Escape:

Using Digital Escape Rooms in Today's Classroom

APRIL 12, 2023





# Agenda

- Basics of digital escapes
- Sample lock
- Tips for Facilitating
- How to Scaffold
- Game Time!
- Digital Resources
- Q & A





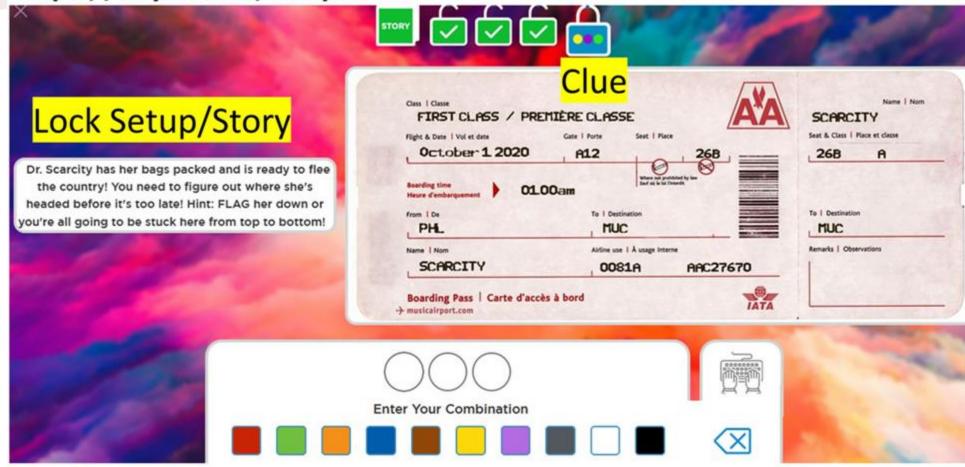
### The Basics

- What IS it?
  - Online version of a physical escape room
  - Teams work together to discover clues and solve puzzles
  - Goal is to progress through a series of locks in a limited amount of time
  - Collaborative, challenging, engaging
  - Complements concepts being learned in class
  - Review, reinforcement, formative assessment
- - An online worksheet



#### Sample Lock:

https://tinyurl.com/SampleLock





# Tips for Facilitating

- Publish game link on a class website (central location, easy to access)
  - http://tinyurl.com/drscarcity
- Pairs are ideal
  - Working solo eliminates collaboration
  - Groups of three create a free rider scenario
  - Breakout rooms can be used in a virtual setting
- Hint card may help students that struggle





### Benchmarks Addressed

Game addresses high school benchmarks but can be adjusted for middle school

#### Benchmarks: Grade 12

| At the completion of Grade 12, students will<br>know the Grade 4 and Grade 8 benchmarks<br>for this standard, and also that:  | At the completion of Grade 12, students will use this knowledge to:  |  |
|---|--|--|
| <ol> <li>Demand for a product changes when there is a<br/>change in consumers' incomes, preferences, the<br/>prices of related products, or in the number of<br/>consumers in a market.</li> </ol>  | 1. Predict the change in demand for a particular brand of jeans when an extensive ad campaign for the brand targets teenagers, their allowances double, the price of other pants increases, or jeans become a popular item among adults.                             |  |
| 2. Supply of a product changes when there are changes in either the prices of the productive resources used to make the product, the technology used to make the product, the profit opportunities available to producers from selling other products, or the number of sellers in a market.                          | 2. Predict the changes in supply and market price for new cars when the cost of labor increases, more robotics are used to produce cars, the prices of trucks rise, or when the number of car manufacturers decreases.   |  |
| <ol> <li>Changes in supply or demand cause relative<br/>prices to change; in turn, buyers and sellers adjust<br/>their purchase and sales decisions.</li> </ol>   | 3. Identify products used in household production that have become more or less expensive (compared to other products) as a result of changes in supply and demand and explain how the price changes affected production and consumption decisions in the household. |  |
| 4. Government-enforced price ceilings set below the market-clearing price and government-enforced price floors set above the market-clearing price distort price signals and incentives to producers and consumers. Price ceilings can cause persistent shortages, while price floors can cause persistent surpluses. | Describe what is likely to happen if the government imposes a price ceiling on gasoline and a price floor on milk.   |  |



## What If?

- What if technology breaks? Encourage students to discreetly record their solutions in case they need to refresh the page.
- What if students cheat? Avoid prizes as an incentive and require students
  to submit a student handout (<a href="https://tinyurl.com/drscarcitystudenthandout">https://tinyurl.com/drscarcitystudenthandout</a>)
- What if I don't have enough computers? Cell phones work great, and students are used to staring at a small screen.
- What if some students fly through the challenges while others struggle? Set the "no man left behind" mentality; high-flyers can assist other pairs with getting <u>unstuck</u>. Reflection questions specific to the content are another option.



# Strategies for Scaffolding

- Before the Game: Doodle Notes
  - Combination of purposeful coloring, doodling, customized student tasks, and specially designed visual triggers
  - Like graphic organizers or guided note sheets but with some upgrades
  - Notes that include vocabulary, key concepts, examples, a variety of input, visual analogies, strategic design and flow
  - https://tinyurl.com/econdoodlenotes



## Strategies for Scaffolding

- During the Game: Student Handout
  - Step-by-step instructions for each lock
  - Extra visuals and hints
  - https://tinyurl.com/econstudenthandout



### Two Versions of the Game

- One without scaffolding: tinyurl.com/drscarcity
- One with scaffolding: <u>tinyurl.com/drscarcity2</u>
- Differences are subtle; can strategically assign different versions within the same class



#### Game Time!

#### The Process:

- You'll be placed in breakout rooms (groups of 4 or 5).
- Decide which version of the game you'd like to play.
  - Both game links will be sent in the chat.
- One group member should share their screen and open the game.
- You'll have **15 minutes** to get situated and work through the first lock (or more!).



#### Link to Additional Games

https://tinyurl.com/econdigitalescapes



## Digital Resources

- Free platform: Google Forms
  - Sample: <a href="https://tinyurl.com/drscarcity3">https://tinyurl.com/drscarcity3</a>
- Paid platform: breakoutedu.com (individual and sitewide licenses available)
  - You do not need an account to access today's games.
- Digital Resources for Digital Breakouts: bit.ly/tools4DBO
- Virtual workshop on physical escape rooms: <a href="https://www.econedlink.org/resources/escape-rooms-in-the-classroom/">https://www.econedlink.org/resources/escape-rooms-in-the-classroom/</a>



### Where to Start

- Brainstorm a mission/theme
  - Dr. Scarcity and her evil plots
- Choose which economic concept(s) to cover
- Break it down into 3-5 challenges
  - What do your students need to know, understand, and do?
  - Consider a silly lock (provides a nice brain break)
- Browse digital resources for inspiration
- Create locks in PowerPoint then save as an image; upload onto platform of your choice

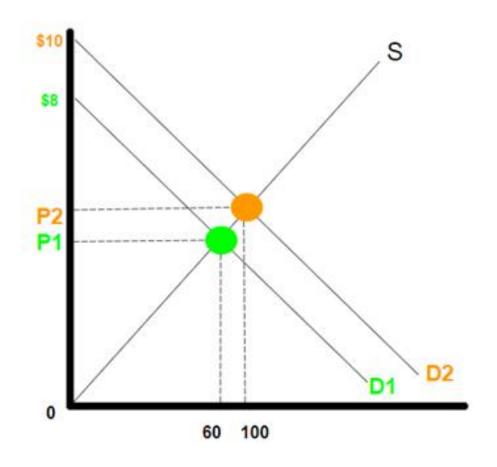


First digital escape will be very time consuming!

# All Links to the digital resources in the slides that follow can be found here: bit.ly/tools4DBO



### Fake Receipt Generator



- Calculate the area of producer surplus.
- Calculate the area of consumer surplus.
- Calculate the area of total surplus.
- Demand increased. Calculate the change in total surplus.

| WHERE COFFEE   | IS ALWAYS | IN DEMAND  | WHERE COFFE  | E IS ALWAYS I            | N DEMAND |
|--|-----------|--|--|--------------------------|----------|
| HON YOU BREWI<br>1 JAVA WAY<br>NEWARK<br>DELAWARE<br>19711   | N?        |  | HOW YOU BRE<br>1 JAVA WAY<br>NEWARK<br>DELAWARE<br>19711 | EWIN?                    |          |
| CASHIER: JOE CUSTOMER: DR.   |           |  | CASHIER: JO<br>CUSTOMER: I                               | DE BEANS<br>DR. SCARCITY |          |
| HOT COFFEE<br>BAGEL W/ CREA  | M CHEESE  | \$1.00<br>\$2.00   | HOT COFFEE<br>PUMPKIN SCO                                | DNE                      | \$2.88   |
| +%   | TAX       | \$8.88   | +%   | TAX                      | \$8.88   |
| TOTAL: \$3.88  |           |  | TOTA   | L: \$4.00                |          |
| PAYMENT METHOD: CREDIT CARD<br>TRANSACTION #1603133440 -001<br>DATE:8/15/2020 11:46:27 AM<br>ALL SALES FINAL |           | PAYMENT METHOD: CREDIT CARD<br>TRANSACTION #1683133515 -881<br>DATE:18/28/2828 18:15:27 AM |  |                          |          |
| THANK YOU  |           | THANK YOU  |  |                          |          |



### Fake Newspaper Clipping



Monday, September 21, 2020

#### Investment in Education P

After decades of investing no longer say, "Why do I public education, U.S. citizens never use this in the real have become far more world!" productive! Students can

school need to learn this?! I'll

The Daily

Sunday, September 20, 2020.

#### Fertilizer Frenzy

are going bananas for a new fertilizer that makes

Farmers across the country growing the delicious fruit a breeze!

Computers

# **Bananas**

For each

scenario, always

start back on the red curve...

#### Martians invade earth

Martians stormed the earth and headed straight for the United States! In a panic, economy is in shambles! 50% of the U.S.

Thursday, September 24, 2020

population fled Canada! The foll

#### Tuesday, September 22, 2020

#### Fido Discovers a New Energ

energy while digging for a the entire country. Stock

A five-year-old Beagle investigation, sources of Rer named Buddy discovered this new energy appear to foll a brand new source of be abundant throughout imp bone in his owner's back prices soar as markets The Upon further respond with optimism.



### Fake Text Message Conversations





#### Rebus Generator





#### Fake News Headlines

Lock Clue: Hopefully, your answers to these questions will ADD UP, so you can unlock the next

challenge...



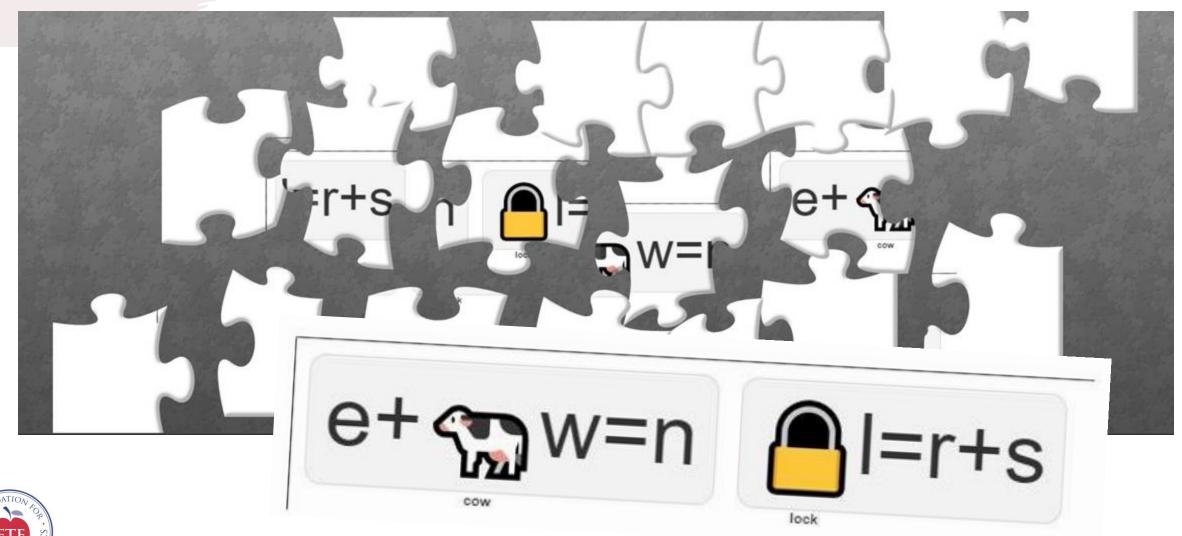
#### Each cup of coffee costs \$2.

| # cups | Total<br>Utility | Marginal<br>Utility |
|--------|------------------|---------------------|
| 0      | 0                |                     |
| 1      | 5                |                     |
| 2      | 8                |                     |
| 3      | 10               |                     |
| 4      | 11               |                     |
| 5      | 9                |                     |

- 1. What is the marginal cost of coffee?
- Calculate marginal utility for each cup of coffee in the table.
- How many cups of coffee has Dr. Scarcity had today?
- Use marginal analysis to help Dr. Scarcity discover how many cups of coffee will maximize her utility.



### Jigsaw Puzzle Generator



### Questions?

Email any time: amy.krzyzanowski@dma.k12.de.us

