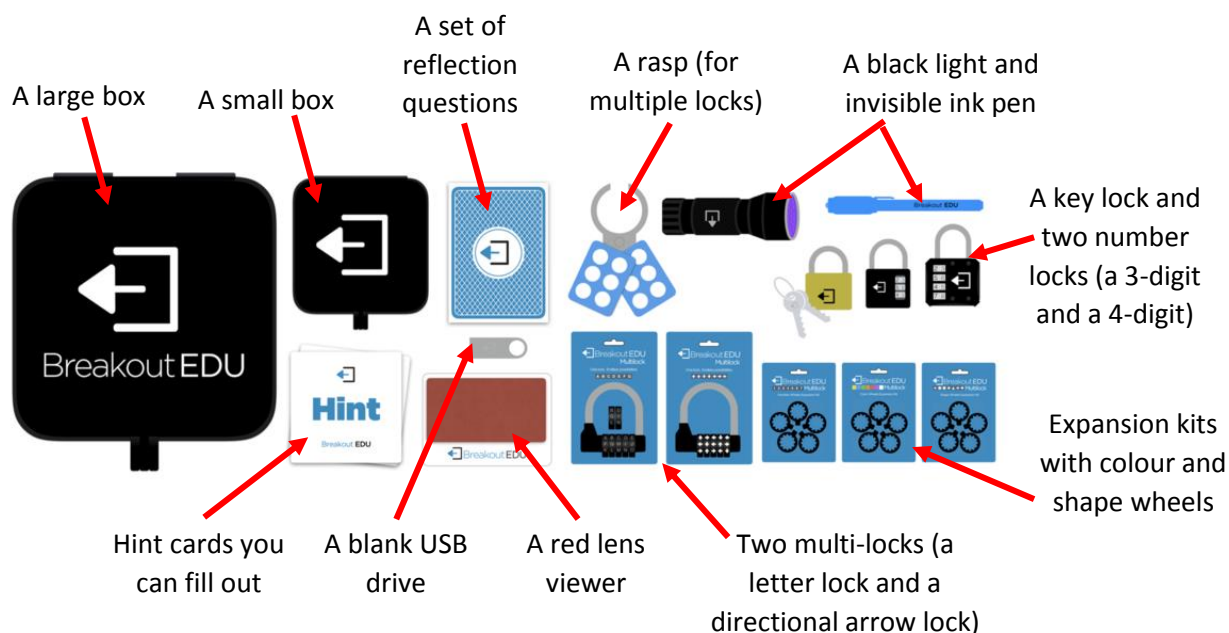


About Breakout EDU: Much like an Escape Room, the collaborative problem-solving puzzle games of Breakout EDU challenge players to work collaboratively to solve riddles, make detailed observations and uncover clues that can help them unlock boxes and solve mysteries. Breakout EDU offers both physical and digital puzzle games for use in elementary, secondary, post-secondary and workplace environments, along with an active online community of game developers.



To play physical Breakout EDU games, a kit is required. These kits cost \$99.00 USD, and Literacy Link South Central has two of them. They can be reused for hundreds of different games and can be combined into different formations. You can purchase your own kit at <https://store.breakoutedu.com/>

Each kit contains:



Online support: Access to Breakout EDU's online platform of games costs \$99 USD per year. The subscription provides you with access to a selection of hundreds of games. Each game is categorized by content focus, recommended group size, play time, and age or education level. Most include both written and video instructions for running the game, required supplies, lock combinations, and downloadable material if anything needs to be printed. A host of online games are now embedded in the subscription site as well.

For more information about Breakout EDU, please visit: <https://www.breakoutedu.com/>



The Game: Dr. Johnson's Lab (Zombie Apocalypse!)

Based on a Breakout EDU game originally designed by James Sanders, modified and expanded for this course.

The story:

You are attending a series of professional development workshops, and your facilitator has called in sick. But don't worry – a colleague of theirs named Dr. Johnson agreed to step in for them. Something is a bit strange about Dr. Johnson though – he spends more time looking at his files than teaching, seems distracted and anxious, and keeps leaving the room unexpectedly.

When he's out of the room, you and the rest of the group decide to take a peek at the files that have Dr. Johnson so worked up. You discover that Dr. Johnson has plans to unleash a deadly airborne virus that would turn anyone who came into contact with it into a zombie. However, you also learn that the doctor has created an antidote that can reverse the symptoms. He plans to save it for himself and family.

You have a limited amount of time to use Dr. Johnson's files and clues in the room to find the antidote and save yourselves (and the world!)

Supplies needed:

- A timer with an audible alarm.
- One large and two small Breakout EDU boxes
- 18 paper clips: 7 of one colour, 2 of another colour, and 9 of a third colour
- A flash drive with the file "Dr. Johnson's Rant" on it
- The black light and its batteries (separately)
- The directional multi-lock (with arrows)
- The 3-digit and the 4-digit number locks
- The key lock and a key to open it
- Hint cards if you choose to use them (suggestions for possible hint cards are included)
- Reflection cards with the following questions on them:
 - Describe how solving a puzzle in the game relates to solving a problem in the real world
 - Describe how another member of your team exemplified critical thinking
 - Describe how this game relates to what you were learning about
- Dr. Johnson's papers (note that one of them has been written on using invisible ink) in an envelope marked "private"
- The antivirus
- The "We Broke Out" sign
- A computer with internet access, ideally connected to a Smartboard or projector so everyone can see what's on the screen easily.

Pre-game preparation:

Note: this game takes some time, and some privacy, to set up. Do as much as you can before participants arrive, and/or schedule a break after taking up the “Skills for Problem Solving” exercise and starting this game.

Hang the arrows on walls around the room, making sure these arrows are facing the proper direction:

- red arrow facing up
- yellow arrow facing down
- blue arrow up
- purple arrow up
- green arrow down

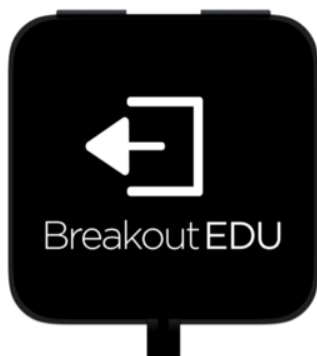
Place the key in the envelope marked “Private”, which contains Dr. Johnson’s papers. Leave this envelope on your desk.



Box 1: Place the paperclips and the black light (without its batteries) inside one of the small Breakout EDU boxes. Attach the key lock to this box. Hide this box somewhere in the room. Note: participants will have to open this box before they can open box 2.



Box 2: Place the batteries for the black light and the flash drive containing the file “Dr. Johnson's Rant” in another of the small Breakout EDU boxes. Set the 3-digit lock combination to 7-2-9 and attach it to this box, then hid it somewhere in the room. Note: participants will have to open this box before they can open box 3.



Box 3: Place the antivirus, the three reflection cards, and the “We Broke Out” sign in the box, and attach the hasp to it. Set the 4-digit number lock to 9-8-5-9 and the directional multi-lock to "up-down-up-up-down". Then, attach both locks to the hasp so both must be unlocked before the box can be opened. This is the final challenge of the game.

Set an audible timer for the amount of time players have to find the antidote. 30-40 minutes is suggested. You may want a second timer that will go off 5 minutes before the end of the game.

The game explained (for the facilitator only):

When participants find both the key in the envelope and the first box, they will be able to unlock it and retrieve the paperclips and the black light.

If they consider the number of different coloured paperclips (7 of one colour, 2 of another colour, and 9 of a third colour) they will be able to open the second lock – the 3-digit combination of 729. They may try it out of order several times first.

When participants find the second box, they will retrieve the batteries for the black light and the flash drive.

They can put the batteries in the black light, and will find a coded message on one of Dr. Johnson's papers (the Statue of Liberty) if they shine the light on it.

When participants plug the flash drive into a computer, they can read the "rant note" left by Dr. Johnson. Note that the red letters in the note spell out [bitlyjohnsontakeover](https://bit.ly/johnsontakeover)

If participants recognize bitly as a URL shortener, they will know to search for this on the internet. If they do not recognize it, they may ask you for a hint at this point. An appropriate hint might be to ask what we often do when we don't know what something means (Google it, usually).

Searching for that text will lead them to <https://sites.google.com/site/dafsdfafsdagfg/>. The top of the site reads "You will feel my WRATH" and it contains several videos and sketches, along with another picture of the Statue of Liberty.



If they click on the statues eyes (as indicated by the message on the picture of the Statue of Liberty they read using the black light) they will be taken to a Google map with several places pinned to it.

The clues embedded in the Google Map include:

- The colours of the photos of each pinned location in the list “we make order in the journey” match up with the colour of the arrows you hung around the room. The arrow directions can be used on one of the two locks on the final box. Note: they should be entered on the directional multi-lock from left to right (red, yellow, blue, purple then green) just as the journey moves from west (left) to east (right) on the map.
- Clicking “Time to Get Out of Here” under the location “the Hideout” will display the address of Dr. Johnson’s hideout (9859 Palmetto Dunes Ct, Orlando, FL 32832) If participants click “A flight alternative: <https://goo.gl/kF24ZE>” they will view a Delta flight of the same number (9859). This is the code to unlock the 4-digit number lock on the last box.

If / when they unlock the final lock and open box 3, participants will find the “antidote” to the zombie virus. Congratulations all around! Take a group photo of everyone with the “We Broke Out!” sign, and have participants answer each of the reflection questions they find in the box.

Note 1: There is no limit to the number of players for this game – in fact, the more players on the team, the better the group is likely to do.

Note 2: While there are some logical steps followed in the building of this game, participants may do things in a completely different order than you expect. Let them. Observe how it goes, and intervene only if absolutely necessary.

At the end of the game:

Please set all locks back to their default position as shown below:

- The directional multi-lock should have all arrows pointing right to unlock
- The letter multi-lock should use AAKUA to unlock
- The 3-digit and 4-digit number locks should unlock with all zeros in the window on the side

For a tutorial on how to use the locks, visit <https://www.breakoutedu.com/locks>