



# **BRAIN CHASE X MESA MATH ESCAPE ROOM**

**IMPORTANT COMPETITION INFO + PRACTICE ESCAPE ROOM**

# What is the Math Escape Challenge?

- Online Escape Room Platform - BrainChase
- Teams will solve three math problems
  - Math is based heavily on critical thinking and problem solving and could use several math concepts - not purely computation
- After solving the math problems, they will play an online escape room
- ***The team who escapes the room the fastest is the winner***
- **Only if no team escapes:** teams will be judged on who answered the most amount of questions in the least amount of time
- Each region will determine whether 1st place only, or 1st and 2nd place will advance to Regionals - Check with your center director

# DASHBOARD COMPONENTS

Perform the icons in the order shown below



DASHBOARD

MAP

LEADERBOARD

BULLETIN BOARD

SUPPORT

LOGOUT

## DASHBOARD

Welcome, Ludwig

SOLVE THE MYSTERY

Proctors will let teams know how much time is left.

**Instructions:** Click the "Watch" icon to begin, then complete each challenge to advance. Can you find the hidden clues and solve the puzzle?

1 & 3

2 4

5



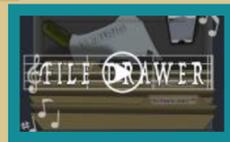
WATCH



CHALLENGE



WATCH



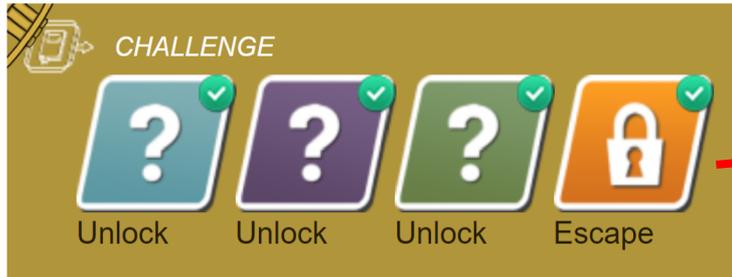
1. Click the watch icon to unlock the challenge questions
2. Exit out of watch icon and solve challenge icon math problems
3. After solving ALL math problems, go back to watch icon to solve escape room
4. You will get a code word after solving the escape room – enter the code into the Escape Icon
5. Click the last watch icon for the completion message

Watch Icon = **Escape Room**

Challenge Icons - **Math Questions**

Completion Message

# CHALLENGE ICONS



**Follow the steps below to complete the challenge**

- 1** **Search.** Return to Elephant Island.
- 2** **Solve.** Work through the puzzle.
- 3** **Escape.** Input the answer below (rounded to the nearest whole number) and click SUBMIT. Stuck? Click "I need a hint."

- Challenge Icons = Math Questions
- **Escape Icon must be the FINAL icon answered! This icon will record the time teams are completely finished with the competition.**
  - *If team clicks the escape icon, they will see the above message*
- **Teams MUST complete the math questions BEFORE doing the escape room.**
  - Teams will not be able to do the escape room without solving the math first. Clues to puzzles in the room are given when the problems are solved.
  - If teams try to do the escape room first, the timestamp information for the team will not work properly and they will not be able to place.

# CHALLENGE ICONS - MATH QUESTIONS

NOTE: THIS IS NOT THE ESCAPE ROOM QUESTION THAT WILL BE USED FOR COMPETITION. TEAMS WILL NOT KNOW THE ESCAPE ROOM UNTIL THE DAY OF THE COMPETITION

The screenshot shows a challenge interface with a purple question mark icon, a title, a numbered question, a hint button, and a completion message. Red arrows point from the title to a 'sample math question' box, from the question text to the same box, and from the hint button to a text box explaining the hint. Another red arrow points from the completion message to a text box explaining that the clue will appear here.

**Follow the steps below to complete the challenge**

**1** An Olympic sprinter ran the 100 meter race in 9.72 seconds. There are 3.28 feet in a meter and 5280 feet in a mile. What was the sprinter's speed for the 100 meter race in miles per hour? Express the answer to the nearest tenth of a mile per hour ( Example: 9.7 mph).

[I need a hint](#)

If you need a hint, you can click this link if available

You have completed the challenge! The correct answer was 23.0. The reed corresponds to the woodwind instrument.

sample math question

Escape Room CLUE will appear here - make sure to write the clue down because you will need it to solve the escape room

## Math Questions

- Teams will enter the answer as a ***numerical value unless otherwise stated.***
- If teams answer the question correctly, they will receive a completion message with a clue that will help them navigate. The time the correct answer is submitted will be recorded on the timestamp
- Teams may answer questions out-of-order **as long as they save the Escape Room for last**

# WATCH ICON -> ESCAPE ROOM / KEY ELEMENTS



- **Magnifying Glass (start here)**
- Hints of the room:
  - **Escape room is point and click** – Elements of the room that have clickable features (links, boxes to enter codes, etc) will be noticeable – the cursor will change to a hand
  - Pair related items (i.e. T-rex tooth to T-rex skull), by entering in the discovered codes.



- Key links will give clues to code answers
- Code answers can be either numbers or words
- **Make sure to have someone in your team write down all the clues you find!**

# MAGNIFYING GLASS



- Teams should **first** locate the magnifying glass upon entering the room
  - Provides directions and clues on what to look for to start their game
    - i/e: find a video about Shackleton's journey
  - Have someone on the team write down all magnifying glass instructions!

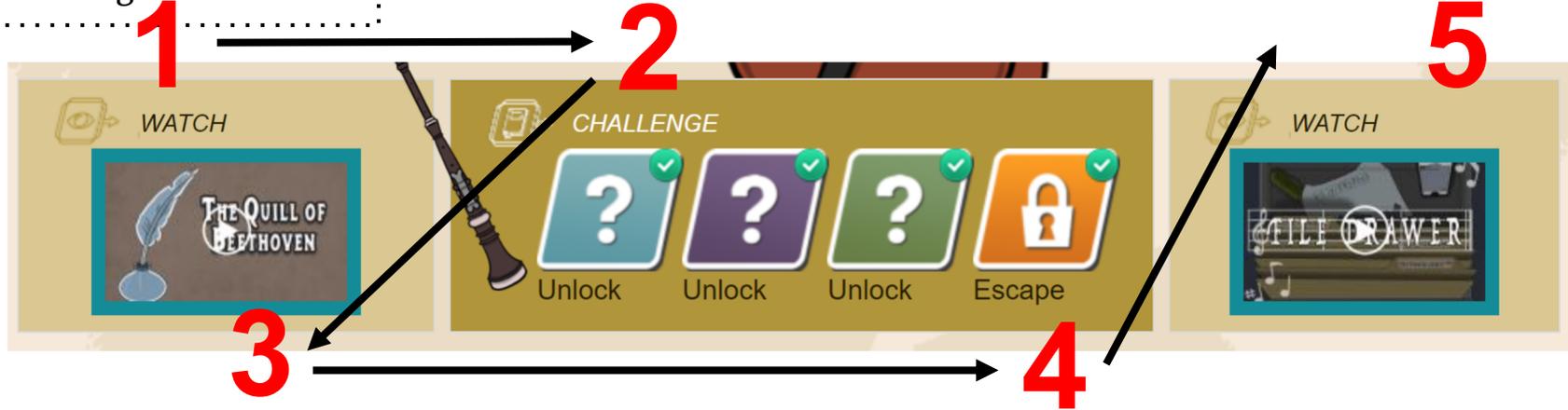
# LINKS

- Teams should also look for link(s) **found by clicking around the room**. These links and their content are important for finding the codes in the escape room.

Click the first watch icon to unlock challenge icons. The first watch icon is the actual Escape Room, so you need to exit back to the dashboard and do the challenge icons first.

Complete math questions (challenge icons) in any order

Return to the dashboard and click the second watch icon to complete the challenge



After solving the math problems, click on the watch icon again to solve the Escape Room.

Click the Escape Icon to enter the escape code you found by solving the escape room

# MESA ESCAPE ROOM COMPETITION LOGISTICS

- Grade Levels: All Middle School / All High School (No Divisions)
- Teams of 2-3
  - Each team should choose a Team Leader who must:
    - Log-in to the Brain Chase platform
    - Input codes and information (navigating and actually completing room)
    - Have ability to enable Flash on their computer
    - Have stable internet connection
    - Share their screen on the Zoom meeting when put into the breakout room with their teammates
    - *Note: some school-issued Chromebooks block outside websites. Be sure your team leader has a backup computer that can access Brainchase*

# MESA VIRTUAL ESCAPE ROOM COMPETITION LOGISTICS

- The team leader will be the one logging into the Brain Chase platform - ***only one team member can log-in.*** *If more than one member is logged in, it could cause issues with the timestamps which would lessen your chance of winning*
- Calculators and scratch paper are allowed. Students should show their work on their scratch paper in case they are required to turn it in at the end of the competition.
  - Full name, grade, school, and MESA center should be on the scratch paper
- Teams will have 1 ½ hours to complete the challenge.
- The problem set may be one question or a series of connected and dependent questions.
- **Solve the math problems first.** Once all problems are solved, teams must try to solve the escape room.
  - If they try to do the escape room before solving the math problems, they will not be able to place in the competition because the timestamps will not work properly.

# MESA ESCAPE ROOM COMPETITION LOGISTICS

- Judging
  - Based on who “escapes” the escape room the fastest **OR**, if no one escapes the **room**, answers the most math questions in the least amount of time
    - This means that if **no team is able to escape the Escape Room portion**, they will be judged on who finishes the most math questions in the least amount of time
- Scratch Paper
  - For preliminary MESA Day, check with your center on whether or not they will need you to turn in scratch paper
  - For regionals, turning in scratch paper is mandatory
  - Each center may have a different way of submitting scratch paper (Wufoo Forms, Google Forms, e-mail, etc)

# MESA VIRTUAL ESCAPE ROOM COMPETITION LOGISTICS

- **Login:** <https://app.brainchase.com/>
  - Logins are case-sensitive!
  - Teams will be **working together on one** log-in. The team leader must share their screen once put into their team's breakout room.
    - **Team Leader:** Make sure their computer can go to the Brain Chase website above. If the site is blocked by their computer, they will need to use a different computer or choose a team leader whose computer can visit the site.
  - Proctors will be dropping in and out of the breakout rooms, monitoring teams and checking if help is needed
    - **Do not cheat! Do not simply guess random values for the answers! Do not begin before instructed to do so! *If caught, team will be disqualified.***
- The game does have music, but it can be muted from the webpage itself if it become distracting or prevents team from communicating with each other

# Resources for Teachers/Students

- Teachers must access these resources through the MARS canvas site
  - If you don't have access to MARS, let your center director know to get you set up
- You can access directly via below:
  - List of Official Math Concepts possibly covered:
    - <https://tinyurl.com/MathEscapeConcepts23>
  - Math Escape Resource for Directors/Teachers
    - This lists out some options for classrooms to practice or demo the challenge
    - Also includes log-ins to demo rooms to try out escape room mechanics
    - <https://tinyurl.com/MathEscapeOptions23>

# Learning by Doing!

The best way to understand the escape room is to try it out for yourself.

- Math is already pre-solved, but there will be clues in the challenge icons that will help you solve the escape room
- Directors and proctors hosting Math Escape should also run through the escape room prior to the competition to be able to help teams through the escape room.

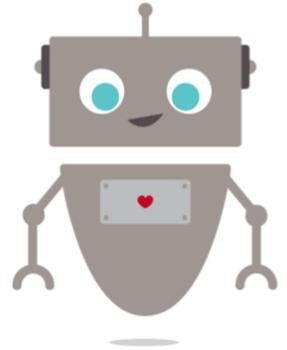
# Good Luck!!

Link to demo room:

[play.brainchase.com/login](https://play.brainchase.com/login)

Username: Demo1\_RegionalMS

Password: demo1



## After logging in:

1. Click on Challenge Icons to check and notate the clues

2. Click on Watch Icon to work your way through the escape room