



The team at Science Friday hopes you enjoyed the Hack Your Brain adventure and learned valuable information about how your brain processes information and memories! How can you use what you've learned to make your life better? Take a moment to reflect on these lessons, write down your thoughts, and share your experiences with a friend, trusted adult, or younger sibling.

Ready for your final challenge? As you've worked through the Hack Your Brain adventure learning about neuroscience, you've also been solving fun puzzles. Each time you successfully submitted your secret code to the Science Friday Enigma Machine, you earned a digital badge. The Machine also revealed a code word for each puzzle. Combine those code words into a sentence to reveal that final code. Enter it in the Enigma Machine to claim a free set of limited-edition Hack Your Brain stickers!

## Puzzle 1 Puzzle 2 Puzzle 3 Puzzle 4 Puzzle 5

Rearrange to make your code sentence

Track your code words



Try one of the game-based neuroscience projects below and help scientists understand more about how the brain works. if you do a project during the month of April, you can contribute to <u>SciStarter's One Million Acts of Science</u> by joining people around the world who are participating in scientific research—just like you!

- Stall Catchers: Clogged blood vessels in the brain (stalls) may contribute to Alzheimer's. In Stall Catchers, you'll "catch" stalls by looking at movies from the brain of mice and scoring blood vessels as "flowing" or "stalled." With your help, scientists could potentially find an effective treatment for Alzheimer's disease quickly enough to make a difference in the lives of people who have the disease now. (<a href="https://scistarter.org/stall-catchers-by-eyesonalz">https://scistarter.org/stall-catchers-by-eyesonalz</a>)
- <u>Mozak</u>: Many neurons have delicate and highly branched structures that human eyes will distinguish far better than computers. In the Mozak project, you'll play games to trace neurons in different brain regions and different organisms. (<a href="https://scistarter.org/mozak-brainbuilder">https://scistarter.org/mozak-brainbuilder</a>)
- <u>EyeWire</u>: This project uses a puzzle-style game where players map nerve cells in the eye using a type of high-tech, 3D coloring book. By mapping nerve connections, EyeWire researchers can gain insights into how neurons process information and detect motion. (<a href="https://scistarter.org/eyewire">https://scistarter.org/eyewire</a>)
- <u>Brain Explorer Research App</u>: Want to play cool brain games and help scientists to understand how the brain works? With the Brain Explorer Research app, you'll play games and answer questionnaires that contribute to research on how brain functions influence mental health. (<a href="https://scistarter.org/brain-explorer-research-app">https://scistarter.org/brain-explorer-research-app</a>)
- Neureka: Through games, quizzes, and surveys, Neureka aims to improve mental health by understanding how mood, behavior, and environment interact. Using the phone app, you can participate in different challenges.
   Researchers use the data collected to understand how the brain works, while you get to build better habits. Note: This project is for those 18 and up. (<a href="https://scistarter.org/the-neureka-project">https://scistarter.org/the-neureka-project</a>)

Science Friday has <u>created a list</u> (<u>https://scistarter.org/list/7025</u>) with even more ways to participate in neuroscience and brain research through exciting community projects. Be sure to create an account to track your progress!