# Hints & Solutions!

On this page are hints to help you with the puzzles as well as the secret codes for each one. Need more help? We've created an Instructor's Guide with additional information at <u>https://bit.ly/HYBguide</u>. Or discuss the puzzles with the Hack Your Brain Online Community at <u>https://bit.ly/SciFriBrains</u>.



More information at <u>ScienceFriday.com/HackYourBrain</u>

#### Puzzle 3: <u>Boost Memory And Learning With</u> <u>The Science Of Sleep</u>

- To create an image of championship cuip, you will need to fold the paper in various directions. As you fold, some parts of the images and numbers will be covered. That's okay! The code only uses the numbers that you can see completely after folding. Use the solid lines of the image to guide you. You should make at least four folds.
- There are seven numbers in the code.
- Note that due to printing differences, things may not line up perfectly.

# Secret code - <u>https://bit.ly/HYBpuzzle3</u> 2352873

### Puzzle 1 - <u>Discover How Your Brain Builds</u> <u>Muscle Memory</u>

- First, you must put the six cards in the right order. There is only one sequence that will start the robot's "feet" at the center of the grid and return to that exact spot.
- Second, pay attention to the "X" on each card. The spot marks the coordinates on the grid for the location of each X.
- Record the coordinates for each X in order. That's your code! Only include the twelve numbers, nothing else.

### Secret code - <u>https://bit.ly/HYBpuzzle1</u> 033111020400

# Puzzle 4: <u>Think Like A Squirrel: Nature's</u> <u>Spatial Memory Expert</u>

- It's important to communicate frequently when working through the maze. Before beginning, establish what words like "up," "down," "right," and "left" mean to each participant. Partners may want to take turns speaking.
- It's ok to use the brain maze map to guide you.
- It may be easier to complete the maze first and then go back to determine what numbers you passed. You need six numbers for the code.

Secret code - <u>https://bit.ly/HYBpuzzle4</u> 428093

# Puzzle 2: <u>Train Your Brain To Manage</u> <u>Stress</u>

- The cards with black letters in the upper left corner are stressors. Use your red film or mirror to decode them. Note the words in all capital letters.
- The cards with numbers in the upper left corner are ways to cope with the stressors. Use your red film or mirror to decode them. Again, note the words in all capital letters.
- Place the stressors in order from A-E.
  Then, match each stressor with a coping skill. The numbers form the code.

Secret code - <u>https://bit.ly/HYBpuzzle2</u> 86753

# Puzzle 5: <u>Hack Your Brain To Increase Focus</u> And Attention

- You are looking for the nerve cell, or neuron, shown to the right. You can find it hidden in Hack Your Brain previous puzzles. Each time it occurs, it is near a number. Those numbers make up the secret code.
- The pictures at the bottom of the puzzle page show the order of the numbers.
   Each is associated with a <u>Hack Your</u> <u>Brain</u> resource. For an easy view, go to the <u>Science Friday Educate</u> page.

Secret code - <u>https://bit.ly/HYBpuzzle5</u> 4925