Puzzlers

Mazes, crosswords, math tricks, magic. All these involve working with puzzles. Test your brain power by solving or creating puzzles.

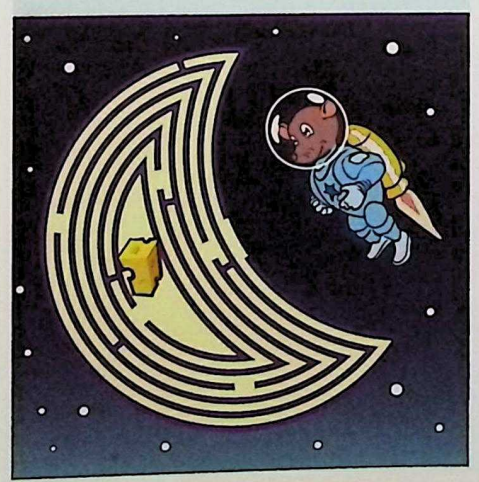


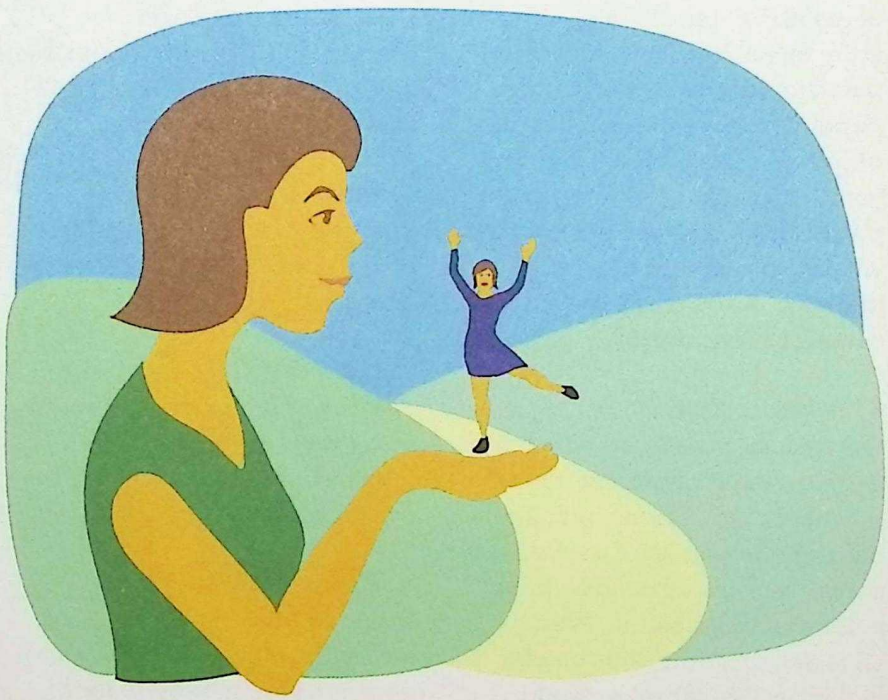
1. A Maze with a Theme

Design your own maze on paper. Give your maze a theme, such as "Help the Bird Find Her Nest" or "Show Sue How to Get to the Beach." Add pictures to make it more interesting. Make copies of your maze and ask at least two other people to solve it. Ask them what they think could make the maze easier or harder.

OR

Create a walking maze on the ground, using tape or chalk, for others to test their skills. Or visit a garden or cornfield that has a maze you can navigate.





2. Crossword Puzzler

Pick a topic and make up your own crossword puzzle. Be sure you have at least five clues across and five clues down. You can use graph paper or a computer software program to help lay out your puzzle. Have a friend or family member try to solve your crossword.

3. Do You See It?

Optical illusions "trick" your eyes. You may see one thing, while someone sees another, or, something may seem to be something that it is not. Look at the optical illusion above. What did you think when you looked at it? Try out optical illusions on your family or friends.

4. Picaria

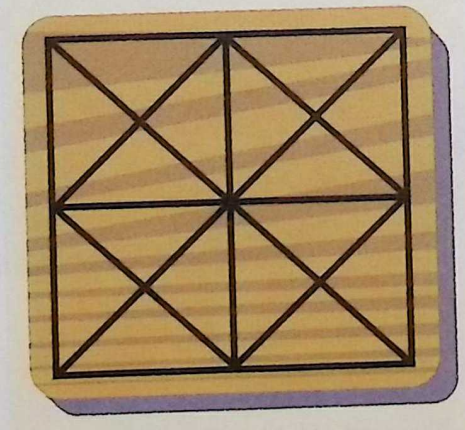
Picaria is a game played by the Zuni people of the southwestern part of the United States. It is thought that the first form of this game was created by Arabian people who lived in Northwestern Africa. They introduced the game to people who lived in Spain hundreds and hundreds of years ago. Spanish travelers brought the game with them to the United States more than 400 years ago.

What You Need

- A game board. The board may be drawn on the ground, stone, or on wood.
- Six counters (pebbles, bottle caps, leftover game pieces)—three for each player.

What You Do

You need two players. Each player has three counters of one color. You move your counters on the diagonal lines attempting to make "three-in-a-row" where the lines intersect.



1. Players take turns putting counters on the game board.
2. Neither player can put a counter in the center spot until all six counters have been put on the board.
3. When the players have taken turns getting all six counters on the game board, the next player may move a counter along a line to the next empty intersection to try to make a row of three counters.
4. Jumping is not allowed.
5. The first person to get three-in-a-row wins.

There are eight ways to do this. Set a time limit. If no one makes a row of three in the given time, the game ends in a tie. Play another version of this game from Ghana and Nigeria called *Achi*, with each player using four counters instead of three.

5. It's in the Cards

Learn and perform three card tricks that use mathematical or logical thinking. See if your audience can figure out how you did your tricks.

6. It's Magic

Become an amateur magician. Learn three magic tricks. You can refer to a book or a kit, or ask someone to help. Practice each trick and then perform them for others. Ask if anyone can solve the trick. Or attend a magic show and learn how at least one of the tricks was done.

7. The Game of Nim

Play the game of Nim, described below, several times with another person. If you are playing with a group, change partners after each game. Figure out strategies that might help you win. Here's how to play:

1. Put nine pennies in three rows, with four pennies in one row, three in the next, and two in the last row.
2. The two players take turns removing pennies using these rules: A player can take away pennies from only one row during a turn. The player can take as many pennies as she likes from the row, but must take at least one.
3. The player who takes the last penny is the winner.

8. Scramble

Word scrambles are a type of puzzle. For example, the letters "nanaba" can be unscrambled to spell the word "banana." Choose a topic, such as sports, books, or Girl Scouts. Scramble the letters of five or 10 words on that topic. Copy your puzzle and try it out on your family, friends, or troop. See who can unscramble the most words in two minutes.

9. Word Search

Make up a word search using a piece of graph paper or a grid that you create. Chose a theme and a title that reflects the words that can be found, such as weather, school, or seasons. Include at least ten words in your search. Ask friends or family to find the hidden words.

10. One Dollar Words

In this math puzzle, each letter of the alphabet represents an amount of money. A =1 cent, B = 2 cents, C = 3 cents, and so on. Find at least three words that are worth exactly $1.00. Ask your friends and family members to join in the fun, and see who can come up with the largest number of $1.00 words in a week.