## BRAIN GAMES

Your brain takes short cuts and looks for the simplest answer (not always the correct answer!). It uses patterns it has seen before to do this. Try these brain puzzles

## Materials:

Pipecleaners
Beads
(pipets and colored water to make drop patterns of water)
Brain Games video on computer
Use National Geographic Brain Game Episodes
Optics slideshow on computer

Little kids: Word of the day "pattern". Ask them what they think it means? start a pattern of beads on a string and ask them to finish it. Have them make their own patterns to test you!
white, pink, white, pink, ?
blue, green, yellow, blue,?
use food coloring and drops of water that they have to use a pipetor to finish the pattern

1. Use keva planks so set up these matchstick puzzles or here.
2. With your left hand, make a peace sign and with your right hand make the $L$ shape with your thumb and pointer finger. now switch hands making the symbols simultaneously (have visitors look at their hands first. Then have them hold their hands such that they cannot see their hands and try to do this). Your brain will learn and get better if you keep trying!!
3. Quick: Which way is the Bus headed?


The correct answer is to the left - the entrance on a bus is always on the right side, which must be facing away. Children, with more recent experience on buses, are much better at answering this question than adults. It illustrates how important cues and former experience are in interpreting a sight or situation.

## 4. TRY THIS

Lift your right foot a few inches from the floor and then begin to move it in a clockwise direction. While you're doing this, use a finger your right index finger to draw a number 6 in the air. Your foot will turn in an anticlockwise direction and there's nothing you can do about it! (The left side of your brain, which controls the right side of your body, is responsible for rhythm and timing. The left side of your brain cannot deal with operating two opposite movements at the same time and so it combines them into a single motion.)
5. TRY THIS:


Bend your left arm about halfway and spread your fingers as far apart as you can. Now touch your open hand with your index finger. Repeat touching each finger reaching for the ceiling in between each attempt. Now do it with your eyes closed-no peeking!
6. TRY THIS:

What is $1+1$ ?
$2+2$ ?
$4+4$ ?
8+8?
Now name 1 vegetable.
(chances are they will say Carrot!) why? what if you just asked people to name a vegetable without doing the math? lets do the experiment! What about other math problems?
7. TRY THIS:
say this outloud

HAY BUM

## PIN

THAN HEIGHT
say with left brain (language), over and over then right brain kicks in to recognize what it sounds like (A bump in the night)

ABE
LANE KISS
DARE
(A blank stare)

THIS
SOUP
HERB
POLE
(The superbowl)

THIS
GUYS
THEY"LL
HYMNN IT
(The sky's the limit)

COMMON SENSE QUESTIONS (read out loud to visitor)

1. Do you feel like you're a person with common sense?
2. You are running a race and you pass the person in 2nd place, what place are you now in?
3. You are driving a bus with 10 people on it. At the first stop, 4 people get off and 2 people get on. At the 2nd stop, 3 people get off and 5 get on. At the last stop 5 people get off and 1 person gets on. How old is the bus driver?
Your brain trades facts for efficiency. You are wired to use mental short cuts to save time and energy based on past experience (common sense). The simplest answer is not always the right answer.
4. How many of each kind of animal did Moses bring on his ark? (it was Noah not Moses)
5. Mary's mother has four children: April, May, June and ...? (Mary!!!)

## RIDDLES

MEANTBB
(Meant to be together)

Cover up the bottom half of this sentence and have guest read it

## IUMRING TQ GQNGIUSIQNS

Your brain looks for patterns for the simplest answer

- show a bunch of black and photo photos (of fruit) and ask what color the bananas were (they might say yellow because that's what their brain is used to seeing). Have fun and record data to see what most people guess/say.


