

# Play the Brain Teaser

1. A man owns 20 blue and 20 brown socks, which he keeps in a drawer in complete disorder. How many socks must he pull out of the drawer on a dark morning to make sure of a complete matching pair?
2. A train one mile long travels at one mile a minute through a tunnel one mile long. How long will it take the train to pass completely through the tunnel?
3. Which is worth more, a carton full of \$5 gold pieces or an identical carton half full of \$10 gold pieces?
4. A signalman has three lights—one red, one white, one blue. He can make a signal by displaying any two together. How many signals can he make?
5. In a certain town there are two groups of men—one group always tells the truth; the other group always lies. A stranger arrived in this town and asked one of the natives whether he was a Truth Teller or a Liar. The native answered, but the stranger didn't hear the answer. Two other natives, A and B, who overheard the conversation, were questioned by the stranger as to what the first man had said. A replied, "He said he was a Truth Teller." Native B replied, "He said he was a Liar." Can you tell which of the two men, A or B, is a Truth Teller and which is a Liar?
6. A bookworm eats his way from Page 1 of Volume I to the last page of Volume II of a two-volume work. The books are standing on a bookshelf in the usual manner with the bindings facing out. If the pages of each volume are 3" thick and the covers  $\frac{1}{4}$ " through, how many inches did the bookworm chew? HINT: The answer is not  $6\frac{1}{2}$  inches.
7. A chemist was working on discovering a liquid in which all substances will dissolve. One day he announced that he had a bottle full of the desired liquid. What's wrong with his claim?
8. A man is served two mugs of coffee but only one saucer. He had intended to keep the coffee in both mugs warm by putting the saucers on top of the cups. Assuming that the man has no other equipment than that mentioned above, what can he do to keep both mugs warm though he has only one saucer?
9. Two men arranged an unusual horse race. It was agreed that the man whose horse crossed the finish line first would be the loser, and the man whose horse crossed second would be the winner. Naturally, as the contestants approached the finish line, they made their horses go slower and slower until they came to a halt, dismounted, and sat down at the side of the road to discuss the situation. A stranger came along, listened to their problem, and suggested a course of action. The men immediately jumped on the horses and sped toward the finish. What did the stranger suggest, consistent with the original arrangements, which made the men spring into action?
10. A sweater worn in the normal way has a label on the inside back of the collar. Assuming that the sleeve which accommodates the left arm when the sweater is worn normally is referred to as the left sleeve, where will the label be if the sweater is turned inside out and the right arm is put into the left sleeve and the left arm into the right sleeve? Will the label be on the front outside, front inside, back outside, or back inside? You are not allowed to use an actual sweater, shirt, etc.

# Answers to Play the Brain Teaser

1. 3
2. 2 minutes
3. It makes no difference—it's by weight, denominations make no difference
4. 3
5. A is the Truth Teller
6. 6 inches
7. Everything would dissolve. The bottle wouldn't be there.
8. One mug on top of another and the saucer set on top of the top mug.
9. They changed horses.
10. Front outside