

## The rubber hand illusion

Which information is more important to the human brain: what we see or what we feel? Watch a psychologist trying to answer this question with a simple demonstration.

### Tasks

Do the preparation task first. Then watch the video and do the exercises.

### Preparation task

Match the definitions (a–h) with the vocabulary (1–8).

#### Vocabulary

1. .... rubber
2. .... an illusion
3. .... my own; your own; etc.
4. .... to stroke something
5. .... simultaneously
6. .... to adopt something
7. .... to be overridden by something
8. .... to rewire

#### Definition

- a. to start using something new; to incorporate something
- b. to gently move your hand against something
- c. to change all the 'wires' (the electrical connections) in a house, machine or the human brain
- d. a flexible material, similar to soft plastic
- e. to become less important than another thing
- f. a false idea or situation
- g. happening at the same time
- h. something which belongs to me, you, etc.

### Task 1

Are the sentences true or false? Circle the correct answer.

	<b>Answer</b>	
	True	False
1. The narrator says that the illusion is fun, but not scientifically important.	True	False
2. In the illusion, Larry first strokes the rubber hand and then strokes the real hand.	True	False
3. After stroking the two hands for a few minutes, the brain starts to prepare for a surprise.	True	False
4. The first volunteer says that the rubber hand starts to feel like her own hand.	True	False
5. The illusion shows that the brain prefers information from our eyes to information from our muscles.	True	False
6. Neuroplasticity is the name for the idea that the brain can be confused by plastic hands, feet, etc.	True	False
7. In some cases, the rubber hand illusion makes a permanent change to the brain.	True	False
8. Larry says that psychologists usually like strange things.	True	False

### Task 2

Write the word from the box that best completes each sentence.

hopefully	simultaneously	surely	temporarily
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1. We're going to just stroke your fingers ....., the rubber finger and your real finger.
2. ...., this will convince you that the rubber hand is your own, that your brain will actually adopt this hand.
3. Slowly but ....., you should feel that the hand you're looking at is actually part of your body.
4. The brain may be ..... rewiring itself to adopt the plastic hand as its own.

### Discussion

Would you volunteer to participate in this experiment? Can you describe any other unusual facts about the human body?

## Answers

### Preparation task

1. d
2. f
3. h
4. b
5. g
6. a
7. e
8. c

### Task 1

1. False
2. False
3. False
4. True
5. True
6. False
7. False
8. True

### Task 2

1. simultaneously
2. Hopefully
3. surely
4. temporarily