SO? What is the major foundation?
Now let’s test our mind:

• Use only one single line to change it from 9 to 6:

SIX
Why are we (or some of us) fooled by the question?

• We only pay attention to one dimension of the question or fact.

• Language can be ambiguous and have hidden meanings.
Now take a look at this cube: Which one is the front side?
Necker Cube: illusion of visual perception
The field of Cognitive Science
Mindware

An Introduction to the Philosophy of Cognitive Science

Second Edition

Andy Clark

New to this Edition:

• Three new chapters (9-11) on cognitive extensions, enactivism, and the predictive brain, and a revised appendix on consciousness

• Extensive revisions, additions, and updates throughout in light of new developments in the field

• New text boxes and revised and expanded suggestions for further reading, including many electronic resources (summarized on the book's Companion Website at www.oup/us/clark)
Research methods in cognitive science

• Computational models
  o Information processing
  o Memory storage
  o Memory search and retrieval
  o Attention
  o Perception
  o Decision making
  o Computer simulation
Research methods in cognitive science

• Experimental methods (behavioral or neuroimaging)
  o Information processing
  o Memory storage
  o Memory search and retrieval
  o Attention
  o Perception
  o Language processing
Behavioral methods

• Reaction time
• Accuracy
• Eye-tracking
• Mouse cursor tracking
Neuroimaging methods

• Functional magnetic resonance imaging (fMRI)
• Electroencephalography (EEG)
• Functional near-infrared spectroscopy (fNIRS)
• Positron Emission Tomography (PET)
Research methods in cognitive science

• Systematic observation
  ○ Group behavior
  ○ Child development
Research methods in cognitive science

• Formal analysis (symbolic or philosophical)
  o Language
  o Reasoning, logic
  o Decision making
Another experiment...

• In the following screen, a name of a category will appear (e.g., fruit). Write down the words belonging to the category that first come to your mind as quickly as possible.
ANIMAL
FURNITURE
PLANT
Now first take a look at your own responses and then compare them to your neighbor’s.

1. Do you find any patterns in your own responses?
2. Is there any common patterns between your and your neighbor’s responses?