



TRUTH & FALSITY

Stimulus

Write the following statements on the board and ask:

Are these a) true, b) false, c) neither or d) both?

- ✓ 'I am 20.'
- ✓ 'I am me.'
- ✓ 'The Simpsons is a really good programme.'
- ✓ 'I am shopping in Lewisham' (when the speaker is shopping, but not in Lewisham)
- ✓ 'This cake is made of jelly' (when it is half jelly and half something else).
- ✓ ' $2 + 2 = 4$ '
- ✓ 'Unicorns only have one horn.'
- ✓ '10 grains of sand make a heap.'
- ✓ 'This sentence is false.'
- ✓ 'Aliens exist.'

Task Question:

Can something be true and false at the same time?

If one of the children says something resembling Russell's Law of Excluded Middle (that something cannot be true and false at the same time: put 'law of excluded middle' in a search engine and visit either wikipedia or stanford) then introduce the following philosophical idea: Bertrand Russell (1872-1970) thought that any statement can only be either true or false - they cannot be both, and they cannot be somewhere in the middle. Do you agree with Russell about this? What are your reasons?

Advanced Task Question:

Bertrand Russell thinks that none of these statements can be true and false at the same time. Can you think what he might say to each of these examples?