THE PHILOSOPHY TOOLKIT

DEDUCTIVE REASONING

When philosophers use an argument to decide whether something is rational or not they infer a **conclusion** from a series of **premises**.

If the premises of an argument logically entail the conclusion, we say that the argument is **valid**. If the premises of the argument are true, then the conclusion must be true. This is an example of deductive reasoning.

Premise 1: Holly is a human

Premise 2: All humans have a brain

Conclusion: Holly has a brain



It is possible to produce a deductive argument that is valid – because it is logically sound - **but not true**. If one or more of the premises are not true, then the conclusion may be logically valid but false.



Premise 1: Elvís Presley is alive

Premise 2: All living things reside in Rainham

Conclusion: Elvís Presley resides in Rainham

Like the first example, this argument is valid. Given the two premises, the conclusion must follow. But the conclusion is **false** – because the premises are false.

So in order to ensure that we have a conclusion that is true, we need to ensure two things:

- All of the premises are true
- The argument is valid