According to Sieg, the Life-blood of logic is *arguments*.

1. *Arguments are composed of statements.*

Statements are here understood as expressions which may be either true or false.

However, statements must be distinguished from sentences. Why?

Single sentences may express different statements:
- Sentences involving indexicals
- Ambiguous sentences (lexical and structural)

Different sentences may express the same statement:
- Paraphrased equivalents
- Translational equivalents
- Indexical equivalents

Some sentences don’t have truth-values:
- Interrogatives (questions)
- Imperatives (commands)
- Exclamations! (What of “yes”?)

[As an aside, there are cases of logical reasoning from non-statements such as imperatives.]

For example: What follows from?

Either shut the door or turn off the air conditioning!
Don’t you dare turn off the AC!

To me, this suggests that we should aim for a more expansive notion of logic, but I won’t dwell on that any further….

2. *These components are divided into premises and conclusion(s).*

The conclusion is what is being argued for: Conclusion indicators….

The premises are the assumptions from which an argument proceeds: Premise indicators…

‘If…then” Statements are not arguments! Tell me why not.

What’s the difference between, “*Since* you all got A’s, I’ll buy you a cake.” And “*If* you get all A’s, I’ll buy you a cake.”?

3. *Standard Form: Conclusion indicated by being placed under a line*
A challenge - Put the following into standard form:

“You ask me whether cats are afraid of water. Does a bear defecate in the woods? That why you really shouldn’t shower with a cat unless you wear proper protection.”

“Beans, beans, the magical fruit! The more you eat, the more you toot. The more you toot, the better you feel. So eat beans at every meal!”

4. Arguments can be evaluated as more or less successful (assessed as good or bad)

A “good” argument (also known as a sound argument) is one in which the conclusion should be believed solely for reasons given by the argument’s premises.

For an argument to be good, two conditions must be met:
(i) The premises must be true.
(ii) The conclusion must “follow” from those premises. The assumed truth of the premises must guarantee the truth of the conclusion (it couldn’t be otherwise). Or in the case of “inductive” arguments, the assumed truth of the premises must make it likely that the conclusion is true as well.

An argument that meets this second requirement is said to be VALID.

5. A question: Is the distinction between premises and conclusion of an argument a mutually exclusive one?

NO! Some statements in an argument may be conclusions from others which serve as their premises and these statements may in turn serve as premises for further conclusions.
We can see the usefulness of such intermediary conclusions in the case of PROOFS: a method of demonstrating the validity of drawing a conclusion from some premises through a series of intermediary steps.

Example: The “Stick” Argument:
A and Not A.
Thus A
Thus A or B
But not A
So B

6. One of the key insights animating this class is that some arguments are discernibly valid simply due to their abstract form.

Thus we have formal logic, and symbolization schemes in order to represent these abstract forms. This is the project initiated by Aristotle.

(More to say about this?)