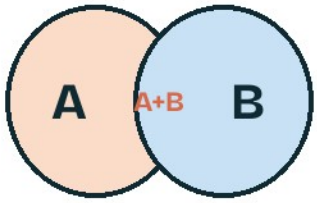
Logic and Critical Thinking

Reason clearly

WHAT IS IT?

Logic is the study of good reasoning. It shows how to tell whether a conclusion really follows from the facts you are given, and how to spot arguments that only sound convincing.



A and B overlap here

THE BIG IDEAS

1. An argument has claims (premises) and a conclusion.
2. In a valid argument the conclusion must be true if the premises are.
3. Venn diagrams show how groups overlap.
4. Look for hidden assumptions and missing evidence.

YOU SEE IT WHEN ...

- Puzzles about who is telling the truth
- Ads and claims that sound too good
- Computer code with if, and, or, not

WORDS YOU WILL MEET

Premise
a statement used to support a conclusion

Conclusion
what the argument says follows

Valid
the conclusion must follow from the premises

Fallacy
a mistake in reasoning that looks convincing

Negation
the opposite of a statement

Truth table
a chart of every true and false case

GOOD TO KNOW FIRST

Careful reading.

IN YOUR COURSE YOU WILL ...

- Test arguments for validity
- Spot common fallacies
- Use Venn diagrams and truth tables
- Write clear, supported arguments

Start tip: Ask: what would have to be true for this conclusion to be wrong?

creouts.com · © Creouts Publishing · Free for home and classroom use · Not for resale or redistribution