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# Thinking Logically

**Logical thinking** is the use of reason to arrive at a valid conclusion.

### You use logical thinking when

- you think up reasons your parents should agree to a request
- you decide whether another person's opinion is convincing
- you predict the consequences of an action
- you solve a logical puzzle

In what other situations would logical thinking be important?

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## Thinking Logically

**Cluster Question:** How do you solve a mystery?

Logical thinking is the use of reason to arrive at conclusions.

Directions: Read the excerpt on the following screens from Arthur Conan Doyle's "The Red-Headed League," in which detective Sherlock Holmes explains his logical thinking process. Note how a reader highlighted a passage and jotted down Holmes' observation and conclusion in the right column. Continue with your own notes about Holmes' other observations and logical conclusions.

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Sherlock Holmes' quick eye took in my [attempt to apply his method] and he shook his head with a smile as he noticed my questioning glances [at the new client].

"Beyond the obvious facts that he has at some time done manual labour, that he takes snuff, that he is a Freemason, that he has been in China, and that he has done a considerable amount of writing

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Iately, I can deduce nothing else."

Mr. Jabez Wilson [the client] started up in his chair, with his forefinger upon the paper, but his eyes upon my companion. "How, in the name of good fortune, did you know all that, Mr. Holmes?" he asked. "How did you know, for example, that I did manual labour? It's as true as gospel, for I began as a ship's carpenter."

**Reader Notes** 

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### Thinking Logically

"Your hands, my dear sir. Your right hand is quite a size larger than your left. You have worked with it, and the muscles are more developed."

"Well, the snuff, then, and the Freemasonry?"

"I won't insult your intelligence by telling you how I read that, especially as, rather against the strict rules of your order, you use an arc and compass breastpin."

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"Ah, of course, I forgot that. But the writing?"

"What else can be indicated by that right cuff so very shiny for five inches, and the left one with the smooth patch near the elbow where you rest it upon the desk?"

"Well, but China?"

"The fish that you have tattooed immediately above your right

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wrist could only have been done in China. I have made a small study of tattoo marks, and have even contributed to the literature of the subject. That trick of staining the fishes' scales a delicate pink is quite peculiar to China. When, in addition, I see a Chinese coin hanging from your watch-chain, the matter becomes even more simple." Mr. Jabez Wilson laughed heavily. "Well, continued

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I never!" said he. "I thought at first that you had done something clever, but I see that there was nothing in it after all."

from "The Red-Headed League" by Arthur Conan Doyle