

# THE FIVE WHYS

Getting to the root of "why" something is happening is one of the most difficult things to do when conducting an investigation.

For example, if your car won't start, is it because the engine died, the alternator no longer works, or is it simply out of gas?

**One technique to help students get to the bottom of why things happen is the five whys. Within this technique, students ask "why?" five times to progressively get to deeper levels of understanding.**

## **DIRECTIONS:**

Begin by having students identify something that they observed related to the driving question that is confusing, surprising, or that they saw over and over again.

Afterward, have them brainstorm, "why" it happened. e.g. going back to the car not starting example, one reason could be that the alternator belt broke.

Once done with that, have them ask "why" related to each of the reasons they brainstormed. e.g. using the "alternator belt broke" example, a possible reason it broke could be the car was never taken in for service.

Have students continue to ask "why" related to the topic until they get to the "root cause" or they cannot think of another reason why something might happen.

