# Exercise 25: What is an Apple?

The Problem

Generate a number of abstractions for an apple based on what you plan to do with the apple. Remember, in an abstraction we keep the important details and ignore the unimportant ones.

For example, if you plan to eat the apple, the following characteristics might matter to you:

* Type (Honey Crisp, Red Delicious, etc.)
* Organic or not
* Ripeness
* Quality (number of bruises, worm holes, etc.)

and so on.

Generate "apple abstractions" for the following uses, capturing all the important apple characteristics for each use:

1. Eat it
2. Throw it
3. Skin it
4. Cook it

Discussion

The most important point here is that there isn't a single "correct" abstraction for an apple; the details that matter depend on how we'll use the apple. Similarly, there's no single "correct" abstraction for anything else we model from the real world or in software (if we're writing code). The details that matter depend on what we need to use the model for.

Bonus Fun

Think of various ways you can use an egg and come up with abstractions for each of them.