

The Green Skin

More estimation, percent change, density, and evidence scoring around changes in matter.

[estimation] [percent change] [density] [QUESTIONS ONLY] [PRINT-FRIENDLY]

NAME	PERIOD	DATE
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QUESTIONS ONLY - Practice independently or with a group. Use the class sheet as a model, but solve these numbers yourself.

PART A

A layer of copper

A statue has a copper coating with mass 18 kg and density 9 kg/m^3 .

1 Find the coating volume.

2 If the coating covers 6 m^2 , estimate its average thickness in meters.

PART B

Rust gains mass

An iron nail changes from 20.0 g to 21.6 g after rusting.

1 Find the mass change and percent change.

2 Where did the added mass come from? Connect the answer to the measurement.

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PART C

The candle ledger

A candle and jar together have mass 125.0 g before burning and 124.2 g after burning in a sealed jar.

1 What is the measured mass change?

2 If the jar was open, would you expect the measured mass to change more or less? Why?

PART D

Evidence scorecard

A reaction produces bubbles, a temperature change, and a color change. Evidence scores are 2, 1, and 2 points.

1 Find the total score and the average score per observation.

2 Which observation has the lowest score? What additional measurement could strengthen it?
