

A. Sink or Sail? Computing *Constitution's* immersion factor

Use what you learned in the lesson to answer questions 1–3 below, and enter your answers in the appropriate place in the table. Then use the table to answer the rest of the questions.

**CONSTITUTION'S LONG GUNS**

	24 pounder long gun	18 pounder long gun	12 pounder long gun
weight of shot	_____	_____	_____
weight of gun	_____	_____	_____
number of guns	_____	_____	_____
total weight per caliber	_____	_____	_____

- How much did the cannon balls shot from each size gun weigh? _____
- Each gun averaged about 230 pounds per pound of cannon ball.
How much did the different guns weigh? _____
- How many guns of each size did *Constitution* have on board? _____
- Compute the total weight of all guns of each size and enter in table.
- What was the grand total of long guns on board? _____
- (a) What was the grand total of the weight of all cannon on board? _____
(b) How many tons is this? _____
- Constitution's* immersion factor is one inch per 10 tons of weight aboard her. How many inches did she settle from the weight of her long guns? _____

