Problem of the Week
Problem B
What’s Beneath the Surface?

In each problem below, use the information given about part of the object’s mass to determine the unknown mass.

(a) Contrary to what you may have heard, ostriches do not bury their heads in the sand. But, if one decided to do so just for fun, and its 2000 g head was 2% of its total body mass, then what would be the mass of its entire body, in kilograms?

(b) Generally, about 90% of an iceberg’s mass is below water level. If the mass of the visible portion of a certain iceberg is 50 000 tonnes, then what is the mass of the whole iceberg, in tonnes?

(c) Only a small portion of a growing mushroom is visible; most of the fungus is below the ground. If 5% of a mushroom is above the ground, and this portion has a mass of 100 g, then what is the mass of the mushroom below the ground, in kilograms?