Generic Tasks: Determine Volume/Mass

Cuboid	Determine the volume/mass of the stone.
 It is important to mark in the picture which object is meant.	Data to be measured: Length l= Height h= Width w= The data should be measured several times at different parts to consider deviations from the chosen model. Determining the mass, one has to consider the density as well: Concrete: 1,8-2,4 g/cm³ Granite: 2,6 g/cm³
	Solution: $V = l \cdot w \cdot h$ Determine the mass via multiplication with the density.
	Possible Hints: • Which form equals the stone? • You can assume that it is a cuboid. Determine its volume. • Volume = length multiplied with height multiplied with width • Measure the values in cm and multiply the volume with the density.

Cylinder	Determine the volume/mass of the tree trunk/fountain.
 	Data to be measured: radius r= (alternatively diameter or circumference) height h= Determining the mass, one has to consider the density as well: Beech: 0,7g/cm³ Oak: 0,9g/cm³ Spruce: 0,5g/cm³ Pine: 0,5g/cm³
	Solution: $V = \pi \cdot r^2 \cdot h$ Determine the mass via multiplication with the density.
	Mögliche Tipps: • Which form equals the tree trunk? • You can assume that it is a cylinder. Determine its volume. • Volume = Pi multiplied with square radius multiplied with height • Measure the values in cm and multiply the volume with the density • Fountain: Give the result in liters.