

Name _____

Worksheet for Weighing Dinosaurs

Testing the Experiment

Plastic Model	Scaling Factor	Mass of Plastic Model (kg)	Pseudo Mass Submerged (kg)	Mass of Displaced Water (kg)	Mass of African Elephant (kg)
Elephant					

Did the experiment produce a reasonable result for the known mass of an African Elephant? Yes or No

Weighing Dinosaurs Experiment Using Archimedes' Principle

Name of Dinosaur	Scaling Factor	Mass of Plastic Model (kg)	Pseudo Mass Submerged (kg)	Mass of Displaced Water (kg)	Mass of Dinosaur (kg)

Dinosaur Mass Conclusions

(use only two significant figures)

The approximate mass of a _____ was _____ tons.

The approximate mass of a _____ was _____ tons.

The approximate mass of a _____ was _____ tons.

The approximate mass of a _____ was _____ tons.

Equations and Conversions

Mass of Displaced Water = Mass of Plastic Model - Pseudo Mass when Submerged

Mass of Dinosaur = Mass of Displaced Water x Scaling Factor Cubed ($m_D = m_w \times SF^3$)

1000. grams = 1.000 kilogram

1000. kilograms = 1.000 ton