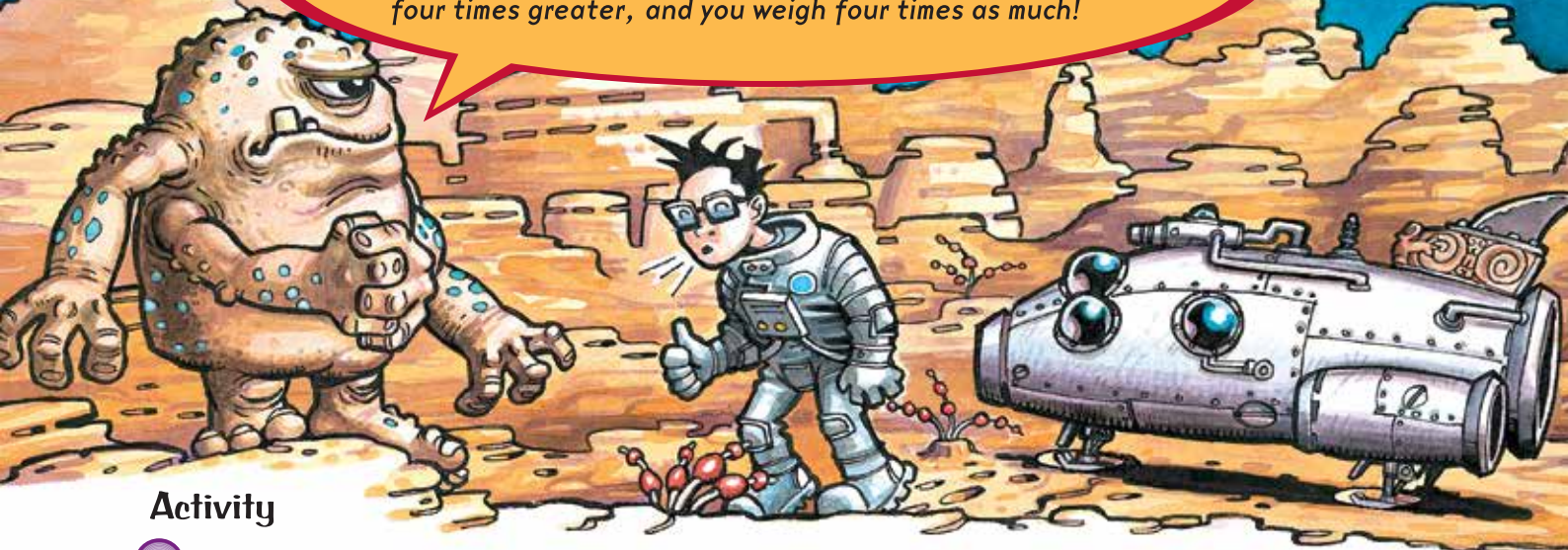


# Getting Heavy



You need  a photocopy of the table copymaster  a calculator

Welcome to Planet Gargantor. It is the year 2103. The mass of our planet is exactly four times that of Earth, but our planet is the same size as Earth. Because of this, gravity is four times greater, and you weigh four times as much!

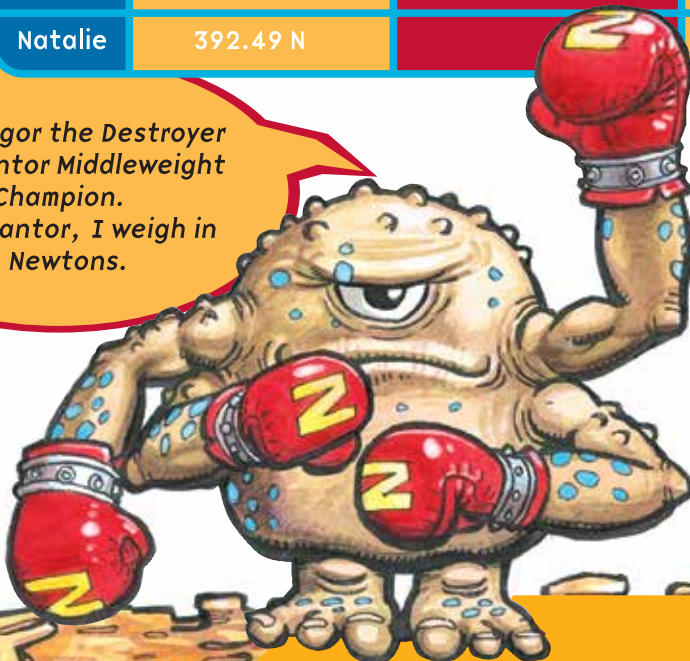


## Activity

1. A mass of 1 kilogram weighs approximately 10 Newtons on Earth. How much would a mass of 1 kilogram weigh in Newtons on Gargantor?
2. Complete your copy of the table and find the rest of the crew's weights on Gargantor.

Name	Weight on Earth	Estimated weight on Gargantor	Weight on Gargantor checked on calculator	Weight on Gargantor to 1 decimal place
Tūrei	525.57 N	2000 N	2102.28 N	2102.3 N
Monica	476.13 N			
Sam	423.92 N			
Natalie	392.49 N			

I am Zingor the Destroyer – Gargantor Middleweight Boxing Champion. On Gargantor, I weigh in at 2900 Newtons.



3.
  - a. Work out how many Newtons Zingor would weigh on Earth.
  - b. A boxer on Earth must weigh less than 730 Newtons to qualify as a middleweight. If Zingor increased his weight to 2920 Newtons on Gargantor, would he be eligible for the middleweight division on Earth?