

## Shopping with Mass in Mind

**Junior Inventors** Name: \_\_\_\_\_

**Shopping with Mass in Mind**

When a bag of groceries is packed carefully, the items with more mass tend to be placed on the bottom of a bag and the items with less mass (and are fragile) tend to be packed on the top to make sure they are not squashed.

Think about packing the following items into a shopping bag. What order should they go in?

Food Item	Bottom, Middle or Top	Estimated or actual weight
Loaf of Bread		
Large Can of fruit		
Pumpkin		
6 pack of Eggs		
1 kg bag of flour		
Big bag of potato crisps		
Bag of lettuce leaves		
Magazine		

Junior Inventors activity sheet © Skoolbo 2015

**Tuning in:** Bring into class a number of different balls, including a medicine ball, a blow up beach ball, a small steel ball and soccer ball. Ask the students, “What are some of the ways we can organise these balls into an order?” Students will hopefully suggest ordering by size and then ordering by weight! Pose the questions, “Did the order change between the size of the balls and the weight of the balls? So is this statement true or false? -the larger the object the heavier it is” Discuss ways to prove their answer.

**Finding Out:** Together, read the article, Masterful Mass and watch the accompanying videos. Watch the video in the digging deeper section and spend some time estimating and then measuring the mass of objects in comparison with a 1 kilogram weight using a balance scale.

**Activity Sheet:** Students consider the best way to pack a bag of groceries, learning that items such as a loaf of bread may be large but has little mass and can be squashed easily.

## TIPS TO SUPERCHARGE YOUR LESSON

### Vocabulary

mass weight shape size inertia gravity density force particles balancescale  
measure estimate actual least greatest

### Mass in Mathematics

Pose word problems around mass. Here is one to get you started:

Each bag of sugar has a mass of 3 kg. 10 bags of sugar balance 3 sacks of wheat. 2 bags of flour balance 1 sack of wheat. What is the mass of each bag of flour? (5kgs)