Take This

A bag of groceries

Plan and make a visit
to the local supermarket

Years 3-4

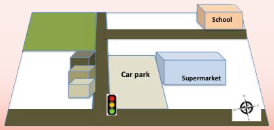
GEOMETRY

Position and orientation
As a class, draw a simple map of the local area and talk about how they will get to the supermarket. Brainstorm key directional and distance words. Have students write instructions for getting to the supermarket.

Take compasses on the supermarket visit. In the car park, locate north. Have students locate and record key landmarks NSEW of this point. Have them record/draw other observations of the surrounding area.

GEOMETRY

In the classroom, provide card, boxes and construction material. Have students work in pairs to make a simple 3D 'map', including four compass points, based on their observations. Have them write about the location of key places on their 'map', using NSEW, and write directions for moving from one place to another.



MEASUREMENT

Volume, capacity and mass
Together list up to ten common food items (eg. bread, cheese, milk, rice, potatoes). Make available several food items, kitchen scales, and I litre measuring jug. Have students find 1kg on the scale and investigate whether items weigh 1kg, more or less. Have students find 1 litre on the jug scale and investigate whether containers hold 1 litre, more or less. Record information on a chart, using kilogram and litre words and their abbreviations. Discuss reasons for using standard units of measure (understood by everyone, fairness).

Read mass and volume information on the packets/containers and discuss these. Connect prices to measured amounts, highlighting the need for accurate (fair) measures. If appropriate (Yr 4) recognize 1000g = 1kg. 1000ml=1L, 500g/ml = ½ kg/L Sort items :more than 1 kg/L, exactly 1kg/L, between ½ kg/L to 1kg/L. less than half of 1kg/L)

Take turns to weigh locally available fruit/vegetables (eg, potatoes), trying to make amounts close to 1 kilogram. Have students record the number of fruit that make 1 kg. Notice the smaller the item, the more that are required to equal 1 kilogram.

STATISTICAL INVESTIGATIONS AND LITERACY

A supermarket hunt for kilograms and litres
Pose an investigation such as: "1 litre and 1 kilogram are commonly used measures in the supermarket." Have students work in pairs/small groups to plan how they could gather data to investigate their "supermarket measures" statement. Eg. Create a chart with column headings:

Food item > 1kg, = 1kg, 1/2kg - 1kg, < ½ kg,
and/or food item > 1L, = 1L, ½ L - 1L, < ½ L

With adult support in a supermarket visit, have student pairs of students record on their chart data for any 3 items per aisle.

On return to class have students sort and present the results of their investigation, using a tally chart and bar graph, naming axes. Have them interpret summary data, write comparison (difference) statements and agree or disagree with the investigation statement, referring to their data displays.

NUMBER AND ALGEBRA

As part of ongoing numeracy learning, using real prices/weights (rounded as appropriate), pose number problems that require students to apply partitioning strategies, repeated addition and simple multiplication strategies, and equal sharing strategies.
Eg. Provide a pricelist of common food items. Ask:

- If you had $20/$50 other $, what could you buy?
- If you had $20/$50 etc. and every third item was half price, what could you buy?
- If you spent $20/$50 etc. on just one kind of food item, what was the item and how many of that item did you buy?
- If you had two shopping bags and could carry 7kg in each, what could you put in your bags?

Provide a list of foods that have a number of items per packet (eg. 20 chocolate biscuits per packet).

- Which of these packets could be shared fairly with 3 people? 4 people? 5 people?

Have students record their solutions using equations with correct notation, and diagrams, explain, compare their strategies, and ask questions of others.