

## Are bigger items always heavier than smaller ones?

Take your child grocery shopping.

- Gather the fruits and vegetables you are purchasing. Ask your child to estimate how much each weighs in grams, and then to verify the actual mass on the store's weigh scales.
- Have your child hold two cans, estimate which one is heavier, and then use the scales to check.
- Ask you child to estimate the mass of 1 apple, then 6 apples. Will 6 apples be heavier than 6 oranges? Than 2 grapefruit?

## **What is the relationship between various units of measurement?**

This is a way to point out how the same thing can be described (weight, height, distance) using different forms of measurement.

- Look at the weight of a solid food, such as a block of cheese. Is it measured in grams or kilograms? If in grams, how can the weight be converted into kilograms?
- Use a tape measure or metre stick to measure your child's height. Then, translate that measurement into centimeters.

**Is there a pattern in the way units relate to each other? What is it?**

**Which period of time is longer?**

Have your child perform calculations with time:

- The Skyhawks have made the playoffs, and tickets are now on sale! It takes  $1\frac{1}{2}$  minutes for each person in line to purchase a ticket, and you are person number 52 in line. How long will you have to wait to buy your ticket?
- If there are 365 days in a year, what day does your birthday land on? Are there more days before or after your birthday in a calendar year?
- What period of time is longer: 3 months or 87 days?

## How fast does a plant grow?

Keep a record of growth over time.

- Plant a bean and keep a scientific journal about its growth with your child. Every day ask your child to measure the different parts of the plant and to draw them, including details of the stem and leaves. Develop a timeline at the end that shows how much the plant grew over a specific period of time (for example: Day One, no growth, Day Two, 1 mm, Day Three, 2.5 mm, Day Four, 1 cm, etc.)
- Or, plant two plants at the same time and have your child compare their rates of growth over time. Is it exactly the same?