

A washing machine has an energy consumption figure of 206 kWh per year. Calculate the cost of running the washing machine for a year using the following electricity price rates.

- \$0.2185/kWh
- \$0.2419/kWh
- \$0.2653/kWh

Leo uses a 800 W microwave oven for a total of 20 hours per week.

- How much energy does the microwave oven use per week?
- What is the cost of using the microwave oven for a week if the electricity is charged at a rate of \$0.2367 per kWh?

The Bailey family has a television set with a 200 W rating.

- How many kilowatt-hours of electricity does it use in a week if it is switched on for an average of 9 hours per day?
- What is the cost of running the TV for a week if electricity is \$0.2259 per kWh?

Samantha uses a hairdryer with a rating of 1.5kW for a total of 8 hours. Her electricity is charged at a rate of 22.81 cents per kWh.

- How many kilowatt-hours were used by the hairdryer?
- What is the cost of using the hairdryer? Answer to the nearest cent.

Darcy uses an iron with a rating of 500 W for an average of 8 hours per week. Find the cost of the electricity used to do the weekly ironing if it is charged at a rate of 25.67 cents per kWh.



- 1 Complete (use 1 calorie = 4.184 kilojoules). Answer to the nearest whole number.
- a 450 Cal = kJ b 1800 Cal = kJ c 15200 Cal = kJ
- d 7600 kJ = Cal e 370 kJ = Cal f 1250 kJ = Cal

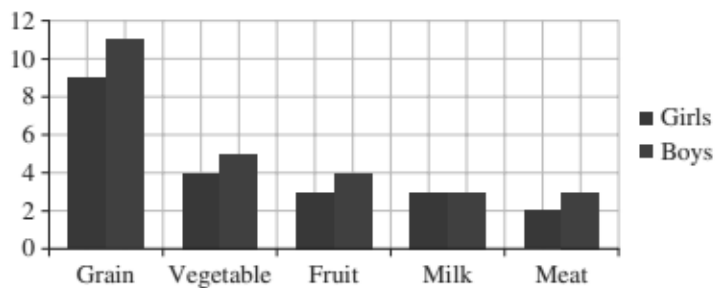
2 The table below shows the approximate energy value of some common foods.

Food	kJ	Food	kJ
Bacon (1 rasher)	960	Milk (small glass)	777
Banana	294	Orange juice (1 glass)	231
Butter (for 1 slice of bread)	105	Potato chips (1 serve)	1512
Cornflakes (1 serve)	441	Toast (1 slice)	420
Egg (fried)	550	Soft drink (1 can)	525

Find the number of kilojoules in following breakfast meals.

- a 3 pieces of toast, butter for toast, 1 serve of cornflakes, milk
- b 2 fried eggs, 2 rashers of bacon, 1 glass of orange juice
- c 1 serve of cornflakes, 1 banana, milk, 1 glass of orange juice
- d 1 fried egg, 1 rasher of bacon, 1 piece of toast, butter for toast
- e 1 serve of cornflakes, milk, 1 glass of orange juice, 2 fried eggs

3 The column graph below shows the recommended daily food servings for teenagers.



- a How many servings of vegetables are recommended for a girl?
- b How many servings of meat are recommended for a boy?
- c Which food groups for girls have three servings of food recommended?