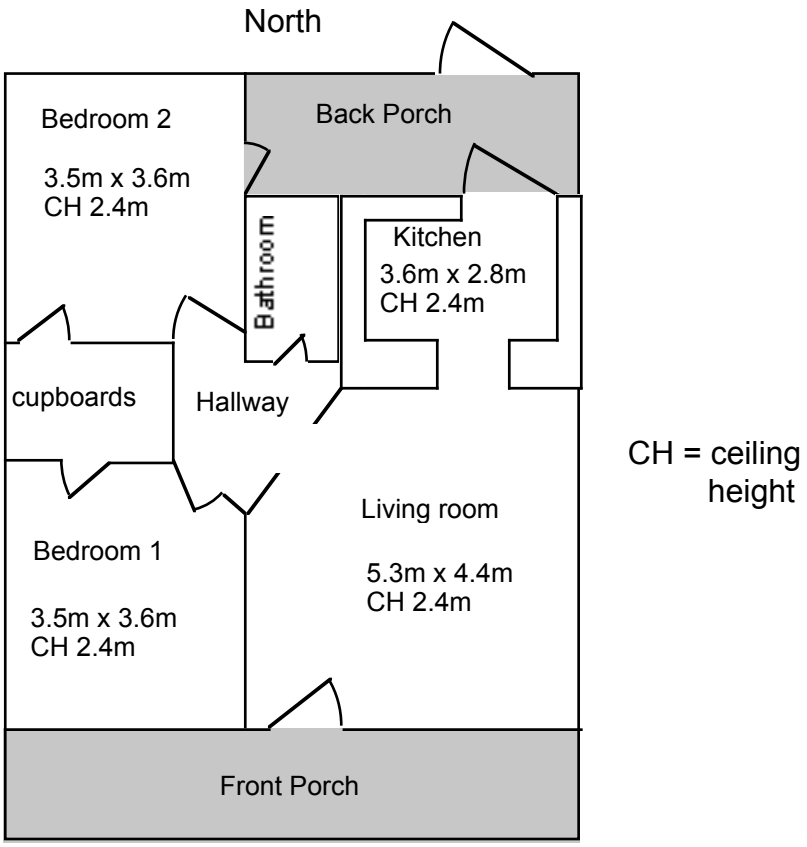
Data sheet **Radiators**

The diagram shows the plan of a bungalow.
The dimensions of the rooms and the ceiling height are given.



CH = ceiling height

Choosing a radiator

To work out the size of a radiator, in kilowatts (kw), needed to heat a room, use the formula

Number of kw = volume of room x 0.04

For example for a room 3m x 4m x 2.5m high

no. of kw = 3 x 4 x 2.5 x 0.04
= 1.2

If a room has a **north** facing **outer wall** then increase the result by 25%

Radiators come in different sizes.
The table shows some radiators and their product codes.

1kw = 1000watts

	Product Code	**Size H x W**	**Heat output**
	055s	500 x 500mm single	399 watts
	065s	600 x 500mm single	461 watts
	068s	600 x 800mm single	738 watts
	065d	600 x 500mm double	858 watts
	310d	300 x 1000mm double	978 watts
	067d	600 x 700mm double	1200 watts
	510d	500 x 1000mm double	1476 watts
	612d	600 x 1200mm double	2058 watts

Questions Radiators

1

(a) Use the formula to work out how many kilowatts of heat Bedroom 1 requires.

Bedroom 1 _____kw

(b) How many more kilowatts of heat does Bedroom 2 require compared to bedroom 1?

Bedroom 2 _____ kw

2

The volume of the kitchen is 24.192m^3

Give the product code of the radiator that is the most sensible choice for the kitchen.

_____

3

To save space in the kitchen, a householder wants one large radiator in the living room to heat both the kitchen and the living room.

The heating requirement of both rooms together is approximately 3200 watts.

She wants to use a **600mm high double radiator**.

Radiators can be made in widths that come in 100mm units.
Estimate the width of radiator she needs for the kitchen and living room together.

_____ mm
