On the following pages you will see photographs of 6 bars of chocolate and how they have been divided into smaller sections.
Also, there is a chart which tells you the manufacturer's name, cost, weight, length and width of each bar. All this information is true!
Later in the booklet there are Resource Pages which show diagrams of how each bar has been divided.

Here are photographs and diagrams of 6 different bars of chocolate.


15 cm


7 cm
16.4 cm
16.4 cm

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

8.3 cm

8.3 cm

15.5 cm
TESCO
Plain
Chocolate


|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 7 cm out each bar of chocolate.

$\bullet$

The \% figures represent the amount of cocoa solids in each bar - the greater the percentage the more pure the chocolate.

| Brand | Cost | Weight | Length(cm) | Width(cm) |
| :---: | :---: | :---: | :---: | :---: |
| Lidl -dark 70\% | $99 p$ | 125 g | 21.5 | 8.5 |
| Green \& Black <br> -dark 85\% | $£ 1.68$ | 100 g | 15 | 7 |
| Fairtrade - <br> dark 70\% | $£ 1.19$ | 100 g | 15 | 7.2 |
| Cadbury - Dairy <br> Milk 20\% | $99 p$ | 150 g | 16.4 | 8.3 |
| Tesco-50\% | 54 p | 175 g | 8.5 | 18 |
| Bourneville - <br> dark 60\% | $£ 1.03$ | 100 g | 7 | 15.5 |

For each bar of chocolate can you.......

1. Work out the area and perimeter.
2. Work out the area and perimeter of one small piece.
3. Work out the weight of just one small piece
4. Work out how much a square metre of each bar of chocolate would weigh and how much would it cost.
5. Work out what percentage of each bar is not chocolate.
6. List the bars in order of value - the most expensive first, the least expensive last for 1 kg of chocolate.
7. Work out how many ways you could share each bar of chocolate between different numbers of people.
8. Work out how many different ways you could divide each bar into two separate pieces whilst using only the lines shown.

My answers

|  | Lidl |  <br> Black | Fairtrade | Cadbury | Tesco | Bourneville |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Area of <br> bar |  |  |  |  |  |  |
| Perimeter <br> of bar |  |  |  |  |  |  |
| Area of <br> one piece |  |  |  |  |  |  |
| Perimeter <br> of one <br> piece |  |  |  |  |  |  |
| Weight of <br> one piece |  |  |  |  |  |  |
| Weight of <br> 1 sq metre |  |  |  |  |  |  |
| Cost of 1 <br> sq metre |  |  |  |  |  |  |
| \% not <br> cocoa <br> solids |  |  |  |  |  |  |

Question 6 - value of bars
Most expensive $\qquad$

Least expensive $\qquad$

Is the cheapest bar the one you would to choose to buy? Yes or No. Give reasons for your choice.

## Question 7

Work out how many ways you could share each bar of chocolate between different numbers of people

Lidl

Green \& Black

Fairtrade

Cadbury

Tesco
Bourneville

Question 8

Work out how many different ways you could divide each bar into two separate pieces whilst using only the lines shown

## Lidl



Fairtrade




