Name _____

Buying plants at the garden centre

You can buy herbs ready growing in pots which you can then grow in your garden at home. You can also buy herbs as seeds.

I looked at seed prices in a local garden centre and this is what I found.

Name	Appearance	No of seeds	Price
Basil		400	£1.99
Chives		1000	£1.89
Coriander		150	£1.99
Dill		200	£1.89
Fennel		250	£1.89
Mint		1250	£1.89
Parsley		6,600	£1.99
Rosemary		100	£1.89
Sage		65	£1.69

Photos from http://www.wyevale.co.uk/on/demandware.store/Sites-Wyevale-Site/default/Search-Show?q=herbs

Name _____

Section A – buying herb seeds

1. I decided to buy some parsley and some dill. **How much did I spend?**

2. I paid with a £5 note. How **much change did I get?**

3. My friend bought rosemary and fennel seeds. **How much did she spend?**

4. She paid with a £10 note. **How much change did she get?**

5. I wondered what the range of prices was. **Can you work it out for me?**

6. I also wanted to know what the average (mean) price was. **What is it?**

7. I noticed that quite a few of the seeds were priced at £1.89 a packet.
What fraction of the packets was priced at £1.89?

8. There was quite a difference in the number of seeds in each packet.
What was the range?

9. **What was the average (mean) number of seeds per packet?**

10. **Do you think this is a true average or does one or more of the figures make the mean meaningless?**

Name _____

Section B – planning a garden

I also bought some flowering shrubs at the garden centre.
When I returned home I decided to put them straight in the garden.
First, I measured the area available. It was a rectangle 2m x 1.5m.

Each metre is 100cm so my plot measures 200cm x 150cm.
Use graph paper to draw a scale diagram where **1cm represents 10cm**.
Mark the front and back of your plot.

I bought five plants. I looked at the labels.

Plant A – grows to 50cm across and 30cm tall.

Plant B – grows to 20cm across and 80cm tall.

Plant C – grows to 10cm across and 20cm tall.

Plant D – grows to 20cm across and 60cm tall.

Plant E – grows to 40cm across and 50cm tall.

Where will you put each plant so it has space to grow and will be seen to best effect?

Draw your plan onto the scale diagram.

Answers

1. I decided to buy some parsley and some dill. **How much did I spend?**
£1.99 + £1.89 = £3.87

2. I paid with a £5 note. How **much change did I get?**
£5.00 - £3.87 = £1.13

3. My friend bought rosemary and fennel seeds. **How much did she spend?**
£1.89 + £1.89 = £3.78

4. She paid with a £10 note. **How much change did she get?**
£10.00 - £3.78 = £6.22

5. I wondered what the range of prices was. **Can you work it out for me?**
£1.99 - £1.69 = 30p

6. I also wanted to know what the average (mean) price was. **What is it?**
(1.99 x3) + (1.89 x 5) + £1.69 = £17.11
£17.11 / 9 = £1.901 (rounds to £1.90)

7. I noticed that quite a few of the seeds were priced at £1.89 a packet.
What fraction of the packets was priced at £1.89?
5/9

8. There was quite a difference in the number of seeds in each packet.
What was the range?
6600 – 65 = 6535

9. **What was the average (mean) number of seeds per packet?**
400 + 1000 + 150 + 200 + 250 + 1250 + 6,600 + 100 + 65 = 10 015
10 015 / 9 = 1112.77 (rounds to a mean of 1113 seeds per packet)

10. **Do you think this is a true average or does one or more of the figures make the mean meaningless?**
Not a "true" average. Distorted by the large number of parsley seeds in a packet. Better to use the median?