

**Back to back stem and leaf diagram questions**

1.

Here are the test scores for 10x3 when they were in year 9 and year 10:

Year 9: 43, 54, 23, 5, 12, 44, 2, 17, 15, 17, 22, 17, 4, 34, 33, 32, 31, 15, 19, 29

Year 10: 56, 64, 32, 25, 32, 56, 21, 26, 25, 32, 32, 36, 19, 45, 47, 49, 54, 48, 52, 59

1. Draw an ordered back to back stem and leaf diagram for this data.
2. Calculate the median, mode and range for each year.
3. Write a paragraph that compares the test scores for each year.

2.

15 children were asked how many hours a month they spend watching TV in summer. They were then asked the same question in the winter. These were the results:

Summer: 24, 43, 53, 84, 32, 8, 17, 18, 24, 42, 53, 32, 34, 12, 18

Winter: 36, 54, 64, 63, 54, 64, 64, 73, 8, 58, 52, 78, 88, 84, 89

1. Draw an ordered back to back stem and leaf diagram for this data.
2. Calculate the median, mode and range for each data set.
3. Write a paragraph that compares the amount of TV watched in the summer and winter.

3.

A drug company gave 20 people a new drug to cure a cold. They gave 20 people a placebo for comparison. They measure how many days it took each person to recover from a seasonal cold.

Test group:

2.1, 3.5, 1.7, 4.3, 6.2, 7.8, 3.9, 5.1, 1.9, 2.2, 2.2, 2.9, 2.2, 3.1, 4.3, 1.2, 2.2, 2.5, 2.6, 3.1

Control group:

4.3, 4.5, 3.2, 6.3, 4.6, 4.6, 6.3, 7.4, 8.2, 4.9, 5.7, 6.8, 6.9, 6.7, 5.3, 8.9, 6.8, 7.6, 1.2, 3.4

1. Draw an ordered back to back stem and leaf diagram for this data.
2. Calculate the median, mode and range for each group.
3. Write a paragraph about the effectiveness of the drug at curing a cold.

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