



Please DO NOT write on the sheets

Please DO NOT write on the sheets

Displaying Data: Stem & Leaf Graphs

Data can be organised using a stem and leaf graph, without having to draw a tally chart.

Example:

Pupils have been collecting cards from packets of chips. Below is a list of how many cards each pupil has collected.

Number of cards pupils have collected

1	2, 7, 5, 8, 6
2	3, 5, 0, 7, 9, 4, 1, 7, 3
3	4, 1, 0, 7



12, 23, 34, 25, 17, 20,
31, 15, 27, 29, 30, 24,
21, 27, 37, 18, 23, 16

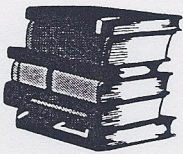
As these numbers are in the 10's, 20's or 30's, the numbers 1, 2 and 3 form the **stem** of the graph. The second numbers or digits form the **leaf** part of the graph and can be added to the graph in the order listed.

Understanding Stem & Leaf Graphs

Task 9

1. List the numbers that are represented in these **stem & leaf** graphs.

Number of books pupils have read this year.



0	7, 9, 3, 5
1	5, 6, 2, 0, 6, 9
2	2, 6, 7, 3, 1
3	2, 0

Time taken on telephone toll calls during a long weekend (minutes)



2	2, 0, 9, 5, 3, 4
3	9, 5, 4, 7, 6, 3, 1
4	8, 2, 7, 0
5	6, 2, 7, 9, 0

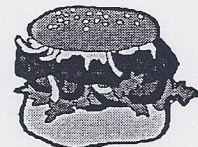


2. How many pupils in the class? 3. What were the longest and shortest toll calls?

Creating Stem & Leaf Graphs

Task 10

A survey was conducted to find out how much families spent on 'take-aways' each week. The results are shown in this box below (rounded to the nearest dollar).



\$12, \$16, \$12, \$9, \$13,
\$17, \$24, \$21, \$14, \$29,
\$8, \$17, \$14, \$22, \$19,
\$25, \$16, \$12, \$20, \$11

1. Create a **stem & leaf** graph for these results.
2. What was the least amount spent on 'take-aways'?
3. How many families were surveyed?

A class was given a test to find out how well they knew their basic multiplication facts. The results are shown in Box A.

4. Create a **stem & leaf** graph for the results in Box A.
5. What were the lowest and highest marks in the test?

Box A

41, 37, 28, 31, 37, 39, 41,
27, 31, 26, 34, 27, 39, 28,
25, 36, 37, 42, 24, 39, 31,
28, 35, 37, 42, 29, 24, 30

The class was given two weeks to relearn the basic multiplication facts before being given the same test again. The results of the second test are shown in Box B.

6. Create a **stem & leaf** graph for the results in Box B.
7. What were the new lowest and highest marks in the second test?
8. What do you think the test was out of?
9. Did the class improve? Can you tell this from looking at the two stem and leaf graphs? Explain your answer.

Box B

29, 36, 39, 42, 48, 46, 38,
45, 37, 32, 46, 50, 41, 39,
37, 29, 36, 48, 46, 32, 46,
37, 30, 46, 40, 46, 37, 34

