## Stem-Leaf Diagrams Revision Exercise

1) The number of cheese sandwiches sold by a sandwich bar was recorded for 15 days.

| 28 | 38 | 19 | 33 | 29 |
| :--- | :--- | :--- | :--- | :--- |
| 32 | 37 | 41 | 27 | 50 |
| 45 | 23 | 44 | 38 | 34 |

a) Display this information in a stem and leaf diagram.
b) Find the median number of cheese sandwiches sold.
c) Find the probability that more than 40 cheese sandwiches were sold on any day.
2) The stem and leaf diagram below shows the heights of the girls in a Primary 7 class.

## Heights

Girls

| 11 | 1 | 6 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 12 | 2 | 5 | 6 |  |  |
| 13 | 0 | 1 | 6 | 8 | 8 |
| 14 | 3 | 4 | 7 |  |  |

12|5 represents 125 centimetres
a) What height is the tallest girl?
b) Find the median height.

The stem and leaf diagram below shows the heights of both the boys and the girls in this class.

## Heights

Boys Girls

|  | 9 | 8 | 5 | 1 | 11 | 1 | 6 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8 | 7 | 4 | 3 | 3 | 12 | 2 | 5 | 9 |  |  |
|  |  | 6 | 2 | 1 | 13 | 0 | 1 | 6 | 8 | 8 |
|  |  |  |  | 7 | 14 | 3 | 4 | 7 |  |  |

$12 \mid 5$ represents 125 centimetres
c) Compare the heights of the boys with the girls in this class.
3) The film Space Trek was shown ten times during one week at the Globe cinema. The stem and leaf diagram below indicates the attendance figures.

## Attendance Figures Space Trek

| 4 | 1 | 7 | 8 |  |
| :--- | :--- | :--- | :--- | :--- |
| 5 | 2 | 3 | 5 | 6 |
| 6 | 0 | 4 |  |  |
| 7 | 5 |  |  |  |

5|2 represents 52 people
a) What is the minimum attendance at a single showing of Space Trek during the week?
b) Calculate the range of the attendance figures?
c) Castle of Horror was also shown ten times at the Globe cinema during the same week. The stem and leaf diagram below indicates the attendance figures for both films.

| Attendance Figures |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Castle of Horror |  |  | Space Trek |  |  |
|  | 8 | 4 | 1 | 7 | 8 |
|  | 40 | 5 | 2 | 3 | 56 |
|  | $1 \begin{array}{lll}1 & 1\end{array}$ | 6 | 0 | 4 |  |
|  | 653 | 7 | 5 |  |  |

Compare the distribution of attendance figures for Castle of Horror and Space Trek.
4) The stem and leaf diagram below shows the ages of the players in the Kestrel's rugby team.

## Ages

Kestrels

| 1 | 9 |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 1 | 3 | 4 | 7 | 9 |  |  |  |
| 3 | 0 | 2 | 4 | 5 | 5 | 5 | 8 | 2 |
| 4 | 1 |  |  |  |  |  |  |  |

2|1 represents 21 years
a) What age is the oldest player?
b) Calculate the range of ages.

The stem and leaf diagram below shows the ages of both the Kestrels and the Falcons rugby teams.

> Ages Falcons Kestrels | 8 | 7 | 7 | 6 | 3 | 2 | 1 | 1 | 0 | 2 | 1 | 3 | 4 | 7 | 9 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | 8 | 6 | 4 | 3 | 3 | 0 | 2 | 4 | 5 | 5 | 5 | 8 | 2 |  |

2|1 represents 21 years
c) Compare the ages of the two teams.

## ANSWERS

1) $a)$

## Cheese Sandwiches

| 1 | 9 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 3 | 7 | 8 | 9 |  |  |
| 3 | 2 | 3 | 4 | 7 | 8 | 8 |
| 4 | 1 | 4 | 5 |  |  |  |
| 5 | 0 |  |  |  |  |  |

## 1|9 represents 19 sandwiches

b) 34 sandwiches
c) $\frac{4}{15}$
2) a) 147 cm
b) $\quad 131 \mathrm{~cm}$
c) The girls are taller than the boys.
3) a) 41 people
b) $75-41=34$
c) Castle of Horror had bigger attendances.
4) a) 41 years old
b) $41-19=22$
c) The Falcons are younger that the Kestrels.

