## Distorted Graphs: Heatwave

NAME:

CLASS:

DATE:

## Basic

1) The number of students who play a particular instrument is shown below.

Present this information on a bar chart.

| Drum | 10 |
| :---: | :---: |
| Trumpet | 4 |
| Guitar | 18 |
| Violin | 6 |
| Piano | 12 |

2) The graph below shows the money saved by Connor during one week.

## Distorted Graphs: Heatwave

## Basic

2) The graph below shows the money saved by Connor during one week


Use the graph to answer the following questions:
a) Connor saved $\qquad$ pence on Friday.
b) He saved $\qquad$ pence more on Tuesday than Monday.
c) He saved seven times more on Saturday than on $\qquad$ .
d) He saved $\qquad$ in total during this week.
e) If Connor needs to save $£ 10$ to buy his mum a present, he needs to save $\qquad$ more.

## Distorted Graphs: Heatwave

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## Core

1) Complete the bar chart using the following information to show how many and what type of pets are owned by students.

- There are two fewer dogs than cats.
- Only one child has a parrot at home.
- The number of fish added to the number of guinea pigs is equal to the number of cats.
- There are twice as many fish as hamsters. $\qquad$

2) What could be done to the following graph to make it easier to read the information presented? Show how it could be changed.

Printer Sales Quarter 4


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Advanced

1) The pie chart below shows how a person spent an average 24 -hour day.

a) How many hours did they spend watching TV?
b) How many hours did they spend exercising?
c) How many hours did they spend not sleeping?
2) Mrs Brown recorded her group's test marks in a stem and leaf diagram:

|  | Mrs Brown’s Test Marks |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 9 |  |  |  |  |  |  |  |  |
| 2 | 5 | 8 |  |  |  |  |  |  |  |
| 3 | 0 | 2 | 4 | 6 | 6 | 6 | 6 | 7 |  |
| 4 | 0 | 1 | 3 | 3 | 5 | 6 | 8 | 9 | 9 |
| 9 |  |  |  |  |  |  |  |  |  |
| 5 | 0 | 0 |  |  |  |  |  |  |  |


| $n=23$ | 1 | 9 |
| :--- | :--- | :--- |

a) What are the lowest three marks?
b) What was the range of the top 10 marks?
c) What is the median mark?

## Distorted Graphs: Heatwave

## ANSWERS

## Basic

1) Instruments Plaued in Music Classes

2) a) 45
b) 25
c) Thursday
d) $£ 1.60$
e) $£ 8.40$

## Core

1) 


2) The scale of the vertical axis should be changed to make the information easier to read:


Distorted Graphs: Heatwave

## ANSWERS

## Advanced

1) a) 2.4
b) 2.88
c) $\mathbf{1 3 . 9 2}$

2) a) $19,25,28$
b) 7
c) 40
