Frequency Tables-Questions

Key Stage 3: 2003 Paper 2 Level 3-5

1.

Mark did a survey.

He asked pupils in his school:

'Do you like the colour of the school uniform?'

The table shows his results.

| | Yes | No | Don't know |
|--------|-----|----|------------|
| Year 7 | 35 | 17 | 2 |
| Year 8 | 20 | 24 | 5 |
| Year 9 | 19 | 17 | 6 |

(a) How many pupils from year 7 took part in the survey?



(b) Altogether, more pupils said 'Yes' than said 'No'.
How many more?



(c) Mark asked the same question to 40 pupils in year 11 25% said 'Yes'. 50% said 'No'. The rest said 'Don't know'.

Complete the table to show how many pupils from year 11 gave each answer.

| st 82 | | Yes | No | Don't know |
|-------|---------|-----|----|------------|
| 1 | Year 11 | | | |

2 marks

(d) Anna does a different survey with pupils in year 9
She wants to know if more boys than girls have pets.

She asks:

'Do you have a pet?'

What labels should Anna use on her results table? Fill in the missing labels.

| | 1 | 1 |
|---|---|---|
| ١ | | |
| 1 | | |

1 mark

9. The table shows how much it costs to go to a cinema.

| | Before 6pm | After 6pm |
|--------------------------------|------------|-----------|
| Adult | £3.20 | £4.90 |
| Child (14 or under) | £2.50 | £3.50 |
| Senior Citizen (60 or over) | £2.95 | £4.90 |

Mrs Jones (aged 35), her daughter (aged 12), her son (aged 10) and a friend (aged 65) want to go to the cinema.

They are not sure whether to go before 6pm or after 6pm.

How much will they save if they go **before** 6pm? Show your working.

| £ | |
|---|--|
| 1 | |

3 marks

Mark did a survey.

He asked pupils in his school:

'Do you like the colour of the school uniform?'

The table shows his results.

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| Year 9 | 19 | 17 | 6 |

(a) How many pupils from year 7 took part in the survey?

•

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(b) Altogether, more pupils said 'Yes' than said 'No'.
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How much will they save if they go **before** 6pm? Show your working.

P

| £ | 1 | |
|---|-----|-------|
| _ | 3 : | narks |

The table shows the average heights of boys and girls of different ages.

| Age (years) | Average height for boys (cm) | Average height for girls (cm) |
|-------------|------------------------------|---|
| 7 | 122 | 121 |
| 9 | 134 | 133 |
| 11 | 143 | 144 |
| 13 | 155 | 155 |
| 15 | 169 | 162 |

(a) What is the average height for girls aged 9 years old?

| 1 | | |
|------|--------|--------|
| 1000 | cm | 1 mark |

(b) A boy and a girl are both 15 years old.

Their heights are average for their age.

How much taller is the boy than the girl?

| - | cm | |
|---|--------|--------|
| | cm | 1 mark |

Key Stage 3: 2006 Paper 2 Level 3-5

6. Five people played each other at tennis.

The table shows who won each game.

For example, when Bob played Ann, Bob won.

| | Ann | | | | |
|------|-----|------|------|-----|----|
| Ann | × | Bob | | | |
| Bob | Bob | × | Carl | | |
| Carl | Ann | Carl | × | Dan | |
| Dan | Ann | Dan | Carl | × | Ed |
| Ed | Ann | Bob | Carl | Dan | × |

(a) Ann played four games.

How many games did she win?

1 mark

(b) Write the name of the person who lost all their games.



T month

(c) Explain why there is a cross (x) in some of the boxes.

Lenak

20. The table shows information about the rainfall in two places in South America.

| Place | Season | Mean rainfall | Number of months | Months |
|-------|--------|-----------------|------------------|-------------|
| | Dry | 10 cm per month | 8 | Jan to Aug |
| A | Wet | 20 cm per month | 4 | Sept to Dec |
| | Dry | 5cm per month | 10 | July to Apr |
| В | Wet | 50 cm per month | 2 | May to June |

Which of the places has **more rainfall** on average over the whole year? Show working to explain your answer.

| Tick (✓ |) your answer. | |
|---------|----------------|---|
| | A | В |

2 marks

1. The table shows the different types of light bulb sold in a shop.

Power

| | 25W | 40W | 60W | 100W | 150W |
|-----------|----------|----------|----------|------|------|
| Round | ✓ | 1 | ✓ | | |
| Normal | | ~ | ✓ | 1 | 1 |
| Long life | | ✓ | ~ | | |
| Coloured | ✓ | | | | |
| Reflector | | 1 | 1 | 1 | |

Type of bulb

Use this information to answer these questions.

| (a) Lor | ng life | bulbs | are | sold | with | two | different | powers. |
|---------|---------|-------|-----|------|------|-----|-----------|---------|
|---------|---------|-------|-----|------|------|-----|-----------|---------|

What are these powers?

| - | W | and | w | |
|---|---|-----|---|--------|
| | | | | 1 mark |

| (b) | One | type of | f bulb | is | only | sold | with | a | power | of | 25W. |
|-----|-----|---------|--------|----|------|------|------|---|-------|----|------|
| | | | | | | | | | | | |

What type of bulb is this?

| | _ |
|--|--------|
| | T mark |

Key Stage 3: 2010 Paper 2 Level 3-5

1. The table shows information about classes in a school.

| Class | Year group | Number of girls | Number of boys |
|-------|------------|-----------------|----------------|
| Α | 10 | 16 | 12 |
| В | 9 | 13 | 13 |
| С | 10 | 14 | 15 |
| D | 8 | 12 | 14 |
| Е | 11 | 14 | 14 |
| F | 7 | 15 | 16 |
| G | 8 | 12 | 13 |

(a) Which two classes are in year 8?Write their letters.



(b) Which two classes have the same number of boys as girls?
Write their letters.



(c) Which class has the most pupils altogether?
Write its letter.



12. A shop charges to deliver food to people's homes.

The cost depends on the day of delivery.

| Day of delivery | Cost |
|----------------------|-------|
| Tuesday or Wednesday | £3.99 |
| Monday or Thursday | £4.99 |
| Friday or Saturday | €5.99 |
| Sunday | £6.99 |

| | | Ju | ıly 20 | 08 | | |
|----|----|----|--------|----|----|----|
| Su | М | Tu | W | Th | F | Sa |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

| (a) What is the cost of delivery on 18 July 2008 | (a) | vvnat is the | COSL | OI | delivery | On | 10 | July | 2000 |
|--|-----|--------------|------|----|----------|----|----|------|------|
|--|-----|--------------|------|----|----------|----|----|------|------|

| 3 | 1 mark |
|---|--------|
| | 1 mark |

(b) Mrs Jones wants a delivery every Thursday in July 2008.

How much will that cost altogether?



(c) What is the cost of delivery on 5 August 2008?

| 1 | 3 | |
|------|---|--------|
| 20,0 | | 1 mark |

23. The table shows information about six types of bird that can be seen in Britain.
The birds are listed in order of size from biggest to smallest.

| Name of | Size of | When it ca | Average | | |
|---------------|---------------------|------------|----------|--------|--|
| bird | bird | Summer | Winter | length | |
| Mistle Thrush | Å Biggest | 4 | ✓ | 31 mm | |
| Fieldfare | Diggest | | ✓ | 29 mm | |
| Blackbird | | ~ | ✓ | 29 mm | |
| Ring Ouzel | | ✓ | | 30 mm | |
| Song Thrush | Constlant | ~ | ✓ | 27 mm | |
| Redwing | Smallest | | √ | 26 mm | |

Use the table to answer these questions.

(a) What is the name of the smallest bird that can be seen in summer?

In this table, the bigger birds always have bigger egg lengths than the smaller birds.

Is he correct?

Yes No

Explain your answer.

1 mark

Key Stage 3: 2010 Paper 2 Level 4-6

2. A shop charges to deliver food to people's homes.

The cost depends on the day of delivery.

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| Friday or Saturday | £5.99 |
| Sunday | £6.99 |

| July 2008 | | | | | | | | | |
|-----------|----|----|----|----|----|----|--|--|--|
| Su | М | Tu | W | Th | F | Sa | | | |
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | | | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | | | |
| 27 | 28 | 29 | 30 | 31 | | | | | |

(a) What is the cost of delivery on 18 July 2008?

| 3 | 1 mark |
|---|--------|
|---|--------|

(b) Mrs Jones wants a delivery every Thursday in July 2008.

How much will that cost altogether?

| 1 | 3 | 1 mark |
|---|---|--------|
| | | 3 mark |

(c) What is the cost of delivery on 5 August 2008?

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Use the table to answer these questions.

(a) What is the name of the smallest bird that can be seen in summer?

In this table, the bigger birds always have bigger egg lengths than the smaller birds.

Is he correct?

Yes No

Explain your answer.

1 mark

Key Stage 3: 2011 Paper 1 Level 4-6

The table shows information about all the pupils in a class.

| | Number of boys | Number of girls |
|------------|----------------|-----------------|
| Brown eyes | 9 | 7 |
| Blue eyes | 3 | 8 |

Use the table to show what the numbers below represent.

The first one is done for you.

| | There are 9 | boys with brown eyes. | |
|---|--------------|-----------------------|--------|
| - | There are 8 | | 1 mark |
| - | There are 15 | i | 1 mark |
| - | There are 27 | | 1 mark |

20. This table shows some students' scores in a mathematics and a science test.

| Student | A | В | С | D | E | F | G | н | 1 | J |
|-------------|----|----|----|----|----|----|----|----|----|----|
| Mathematics | 29 | 33 | 17 | 44 | 21 | 18 | 30 | 31 | 12 | 18 |
| Science | 23 | 31 | 15 | 39 | 20 | 18 | 17 | 29 | 13 | 17 |

| 1-1 | 0 | 44- | | | for the same | *** | Acres and | 45 - | | |
|-----|--------|-----|----------|-----|--------------|-----|-----------|------|---------|-------|
| (a) | One of | tne | students | was | reeling | 111 | during | tne | science | test. |

Which student is that most likely to be?

| tudent | - I made | |
|--------|----------|--------|
| | tudent | tudent |

(b) Another student was absent from the science test, but scored 38 in the mathematics test.

What mark would you expect them to have scored in the science test if they had been able to take it?

