Two way tables

| Name: | | | | | | | | MATHS SCHOOL maths-school.co.uk |
|-------|--------------|-----------|--------------|-------|--------------------------------|---|--|------------------------------------|
| 1) | Brow Hair | | onde Iair | Tota | | | nany girls have brown hair? nany boys have blonde hair? | |
| Girls | 8 | | 6 | 14 | | 110 10 1 | hany boys have bionae han : | |
| Boys | 9 | | 7 | 16 | c) | How n | nany girls are there? | |
| Total | 17 | | 13 | 30 | - d) | How r | nany people are there altogether? | <u>}</u> |
| | | | | 1 | | - | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | Ro | Rock Dane | | Рор | Total | e) Ho | ow many Men like Rock music? | (|
| Men | /len 12 6 | | 9 | | f) Ho | w many Women like Dance music? | | |
| Wome | n 2 8 13 | | | g) Ho | ow many people like Pop music? | | | |
| Total | | | | | | h) How many people are there altogether | | \ |
| | | | | - | | • • • • • • | | ļ |
| | (| Chinese | | izza | Indian | Total | i) How many under 20s like Pizza? | |
| Under | 20 | 11 | | 23 | 17 | | j) How many over 20s like Indian? | |
| Over | | 15 | | 16 | 25 | | k) How many people like Chinese? | |
| Total | | | | | | | I) How many over 20s are there? | <u>}</u> |

2) Complete the two way tables:

| а |) | Brown Hair | Blonde Hair | Total | b) | Rock | Dance | Рор | Total | c) | Chinese | Pizza | Indian | Total |
|---|------------|---------------|----------------|-------|-------|------|-------|-----|-------|----------|---------|-------|--------|-------|
| | Girls | 8 | 6 | | Men | | 6 | | 21 | Under 20 | | | 14 | |
| | Boys | | 7 | | Women | 5 | | 13 | | Over 20 | 12 | 14 | 21 | |
| ٦ | , Total | 17 | | | Total | 18 | 21 | | | Total | 28 | | | 80 |

d) People were asked if they preferred football, rugby or cricket. Complete the two-way table using the given data:

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• 24 males were asked

21 people prefer football

• 14 females preferred rugby

• 12 males preferred Cricket, which is 3 times more than women did

• Half as many men preferred rugby to women that preferred rugby

Use the two-way table about people's preferred sauces (complete the table first):

e) If a person is chosen at random, calculate the probability that they prefer ketchup.

f) If a person is chosen at random, calculate the probability that it's a boy who prefers mayo.

g) A girl is chosen, calculate the probability that the girl chosen prefers mayo.

| | Mayo | Brown | Ketchup | Total |
|-----------|------|-------|---------|-------|
| Boys | | 12 | | 29 |
| Girls | 14 | | 19 | |
| Total | 20 | 25 | 30 | |
| | | | | |

Football

Male

Female

Total

Rugby

Cricket

Total

| Exam question: | Maths | Art | PE | Total | |
|---------------------------------------|--------|-----|----|-------|--|
| An incomplete two-way table shows the | Year 8 | 24 | 30 | 48 | |
| favourite subjects of 2 year groups. | Year 9 | | 32 | | |
| a) Complete the table | Total | 46 | | 92 | |

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b) A random student is picked at random,What's the probability that their favourite subject is PE?