1) 


2)

| Array 1 | Array 2 <br> 00000000 00000000 | Array 3 $\begin{aligned} & 0000 \\ & 0 \bigcirc 0 \\ & 000 \\ & 0000 \\ & 0000 \end{aligned}$ |
| :---: | :---: | :---: |
| 1 and 16 | 2 and 8 | 4 and 4 |

3) a) $3,5,6,7,9,10$
b) Possible factors are: $64,32,16$
4) Factors of 18:

1, 2, 3, 6, 9,18
Factors of 20:
I, 2, 4, 5, 10, 20

1) a) True. All numbers are divisible by $I$ and themselves and therefore would have a factor of $I$.
b) False. A factor is a number that multiplies with another number to create a product. If a number is a multiple of another number, then it is also a factor.
c) False. 8 only has four factors - 1, 8, 2 and 4 .
2) 120 and 2

8 and 30
40 and 60
10 and 24

40 and 60 are the odd ones out. They are a factor pair for the product 2400 , while the others are all factor pairs for the product 240.
3) All the children are correct as these are all factor pairs for 24 and would create arrays with equal rows or columns.

1) There are many possible solutions for this question but here are some examples.

Numbers which are not in either of the circles should be arranged around the outside.

2)

| Number | Factors |
| :--- | :--- |
| 60 | $1,60,2,30,3,20,4,15,5,12,6,10$ |
| 72 | $1,72,2,36,3,24,4,18,6,12,8,9$ |
| 84 | $1,84,2,42,3,28,4,21,6,14,7,12$ |
| 90 | $1,90,2,45,3,30,5,18,6,15,9,10$ |
| 96 | $1,96,2,48,3,32,4,24,6,16,8,12$ |

