1) What are the greatest and smallest possible numbers that can be used in these comparisons?

| Smallest Possible Number |  | Greatest Possible Number |
| :--- | :--- | :--- |
|  | $564572<\square<565572$ |  |
|  | $1346125>\square>1344124$ |  |
|  | $9968246<\square<9978246$ |  |

2) Give either the greatest or smallest possible answer that could be used to complete this comparison.

| M | HTh | TTh | Th | H | T | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left\lvert\, \begin{gathered} \mathrm{OO} \\ \mathrm{O} \end{gathered}\right.$ | 00 | $\bigcirc$ | $\left\|\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \mathrm{OO} \\ \mathrm{O} \end{gathered}\right.$ | $\left\|\begin{array}{cc} 0 & 0 \\ 0 & 0 \\ 0 \end{array}\right\|$ | $\left\|\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 \end{array}\right\|$ |


| M | HTh | TTh | Th | н | T | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \mathrm{OO} \\ \mathrm{O} \end{gathered}$ | 00 | O | $\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 \end{array}$ | $00$ | $\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 \end{array}$ | $\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 \end{array}$ |


3) Write a digit in each box so that the numbers are written in order from greatest to smallest.

| a) |  |  |
| :--- | :--- | :--- |
| 6 | 26 | 192 |
| - | 642 | 913 |
| 4 | 51 | 914 |
| 4 | $8 \_1$ | 195 |
| 4 | $89 \_$ | 196 |

b)

650561
6 50_612
6 _18 956

- 418967

541 _ 989

1) Emily says that, in order to complete the empty place value chart with the greatest possible answer, she must use the same number of counters as the completed chart. Is she correct? Explain why.
$\qquad$
$\qquad$


| M | HTh | TTh | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

2) a) Rhys's must sort these numbers into the table below. Each number can only be used once. Can you help him sort as many of the numbers as possible into the table?

| Numbers between 5.5 million and <br> 6.5 million | Numbers between 550000 and <br> 650000 | Numbers between ___ and |
| :---: | :---: | :--- |
|  | - | - |
|  | - | - |
|  |  |  |


| 559600 | 589564 | 5946564 | 6299956 |
| :---: | :---: | :---: | :---: |
| 6489564 | 6549000 | 5642956 | 599600 |
| 6501956 | 649560 | 7199000 | 5449000 |

b) Rhys groups the remaining numbers into the final box with the following statement: Numbers between 1000000 and 8000000 .

Explain why Rhy's statement is incorrect.
$\qquad$
$\qquad$
3) What statement could be used as a heading for the final box?
$\qquad$
$\qquad$

1) Each pupil has a number. Can you work out which number each pupil has by using their statements?

Anna says, "My number is exactly halfway between Ranjit's number and Eli's number."
$\square$
Ranjit says, "My number is one hundred thousand less than Eli's number."
$\square$
Faheen says, "My number is all of the other children's numbers added together and divided by one hundred."
$\square$
Eli says, "My number is ten thousand more than one million."
$\square$
2) Use the digit cards to make ten different numbers which are greater than 1000000 . You can only use a digit card once in each number.

Can you find:

- two numbers with the greatest difference;
- two numbers with the smallest difference;
- numbers with a digit sum that is lower than 30 ;
- numbers with a digit sum that is greater than 30 ?


