1) a) 5683438.5
b) $\mathbf{7 4 6 5 0 0 5 . 9 2}$
c) $\mathbf{6 6 9 7} 280.9$
2) Open-ended questions. Look for answers where the unit parts total the complete number.
3) a) 2257583.4
b) $\mathbf{4 0 0 2 7 8 0 . 9}$
c) 7404323.1
d) $\mathbf{7 1 5 0 8 2 1 . 7}$
e) 3006602.5
4) Both children have partitioned the number correctly - they have both used non-standard partitioning.
5) Open-ended question. Look for any answer where the non-standard unit parts total the complete number.
6) a) $\mathbf{2 0 0} 000$ has been subtracted.
b) $\mathbf{1 0 0 0 0}$ has been subtracted.
c) 1.4 has been subtracted.
7) a) Meera would use 3 ones and they would represent 3000.
b) Open-ended question.
E.g. $\mathbf{3 0 0 0} 000+530000+2400+900+59.6$
8) Open-ended question.
9) Write the numbers:
a) $4000000+1681000+2400+20+18.5$ $\qquad$
b) $7000000+460000+5002+3.92$ $\qquad$
c) $3000000+3600000+97200+80.9$ $\qquad$
10) Partition these numbers into four parts using non-standard partitioning.

11) Complete the calculations.
a) $5257583.4=3000000+$ $\qquad$
d) $7350821.7=200000+$ $\qquad$
b) $4000500.9+2280=$ $\qquad$ e) $3005400.3+1202.2=$ $\qquad$
c) $7404523.1-200=$ $\qquad$
12) Meera and Gary are describing the number 2345037.5 . Who has partitioned the number correctly? Explain your reasoning.


$\qquad$
$\qquad$
$\qquad$
13) 



Prove Gary wrong by finding a different way to partition 4231005.78.
$\qquad$
$\qquad$
$\qquad$
3) Explain what has been subtracted from each number.
a) $5729564.9 \longrightarrow 5529564.9$ $\qquad$
b) $5729564.9 \longrightarrow 5719564.9$ $\qquad$
c) $5729564.9 \longrightarrow 5729563.5$ $\qquad$

1) Meera is using base ten equipment to represent the number 3533539.6 . Here is some of the base ten equipment she has used for standard partitioning.

b) Meera exchanges a thousands cube for ten hundreds flats. Investigate the different ways Meera can represent the number using non-standard partitioning and the base ten equipment.
$\qquad$
$\qquad$
$\qquad$
2) Pop star, Buddy Eyelash, has made so much money he can't spend it all. His accountant has advised him to put some into his savings account, give some to charity and treat himself to a holiday but he's getting confused.

Find 10 different ways to show Buddy how he could partition $£ 4444444.44$

One has been done as an example.


## Non-Standard Partitioning: Roll and Read Game

To compose and partition numbers up to 10 million using non-standard partitioning.

## Instructions

- On your turn, roll the dice.
- Choose one of the numbers on the row that matches the number you rolled.
- Partition the number shown using non-standard partitioning.
- If your partner thinks you are correct, colour and claim that representation.
- Claim four in a line to win.


| $\bigcirc$ | 2327943.5 | 5218045.4 | 9045578.9 | 4562200.56 | 3671004.7 | 5783229.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bullet$ | 4236054.6 | 1014156.5 | 6108789 | 7829311.67 | 1731115.8 | 2902330.9 |
| $\stackrel{\bullet}{\bullet}$ 。 | 8018165.7 | 7873267.6 | 2565890 | 1179422.78 | 9382226.9 | 7039441 |
| $\left[\begin{array}{ll}0 & 0 \\ 0 & 0\end{array}\right]$ | 3128276.8 | 4319378.7 | 8246901 | 6463533.89 | 4972337 | 8184552.1 |
|  | 9537387.9 | 8915489.8 | 5309012 | 2030844.9 | 7332448.1 | 3803663.2 |
| 0 | 6919498 | 3474590.9 | 9466123 | 5680955 | 2783559.2 | 6240774.3 |

Record your non-standard partitioning as an addition sentence as you play the game.

|  |  |  |
| :--- | :--- | :--- |
|  |  |  |



1) Write the numbers:
a) $4000000+1681000+2400+$ $20+18.5$
b) $7000000+460000+5002+3.92$
c) $3000000+3600000+97200+80.9$
2) Partition these numbers into four parts using non-standard partitioning.

3) Complete the calculations.
a) $5257583.4=3000000+$
b) $4000500.9+2280=$ $\qquad$
c) $7404523.1-200=$ $\qquad$
d) $7350821.7=200000+$ $\qquad$
e) $3005400.3+1202.2=$ $\qquad$
4) Meera and Gary are describing the number 2345 037.5. Who has partitioned the number correctly? Explain your reasoning.

5) 



Prove Gary wrong by finding a different way to partition 4231 005.78.
3) Explain what has been subtracted from each number.
$5729564.9 \longrightarrow 5529564.9$
$5729564.9 \longrightarrow 5719564.9$
$5729564.9 \longrightarrow 5729563.5$

1) Meera and Gary are describing the number 2345 037.5. Who has partitioned the number correctly? Explain your reasoning.


2345 thousands, 2 tens, 17 ones and 5 tenths

2 millions, 340 thousands, 503 tens and 75 tenths

2)


Prove Gary wrong by finding a different way to partition 4231005.78.
3) Explain what has been subtracted from each number.
$5729564.9 \longrightarrow 5529564.9$
$5729564.9 \longrightarrow 5719564.9$
$5729564.9 \longrightarrow 5729563.5$

1) Meera is using base ten equipment to represent the number 3533 539.6.
Here is some of the base ten equipment
 she has used for standard partitioning.

a) How many ones would Meera need to use? What would they represent?
b) Meera exchanges a thousands cube for ten hundreds flats. Investigate the different ways Meera can represent the number using non-standard partitioning and the base ten equipment.
2) Pop star, Buddy Eyelash, has made so much money he can't spend it all. His accountant has advised him to put some into his savings account, give some to charity and treat himself to a holiday but he's getting confused.

Find 10 different ways to show Buddy how he could partition £4 444444.44


One has been done as an example.


1) Meera is using base ten equipment to represent the number 3533 539.6.
Here is some of the base ten equipment she has used for standard partitioning.

a) How many ones would Meera need to use? What would they represent?
b) Meera exchanges a thousands cube for ten hundreds flats. Investigate the different ways Meera can represent the number using non-standard partitioning and the base ten equipment.
2) Pop star, Buddy Eyelash, has made so much money he can't spend it all. His accountant has advised him to put some into his savings account, give some to charity and treat himself to a holiday but he's getting confused.

Find 10 different ways to show Buddy how he could partition £4 444444.44


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