**Name of the child :** _____

*This test is designed to identify the progress of children in some sample concepts.*
*For each competency questions A and B are of the same difficulty level, and question C is of the higher difficulty level.*

*Baseline : For each competency we ask question A.  We record his / her response in baseline A record.*

*Endline : We test for these sample competencies again after the six months of Manchadi math lab experience.*
*For each question do the following :*
*If the child could not do question A independently or was not liking it at time of baseline, give question B. Record the response in Endline B record. Also give question C which is of a higher difficulty level. Record the response in Endline C record.*
*If the child could do question A correctly at the time of baseline, give him only question C at the time of endline.*

*If at the time of baseline, the child is already above the level of endline question, this cannot be captured in this test. We can say that the child is at or above the expected level.)*
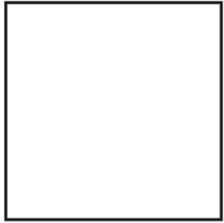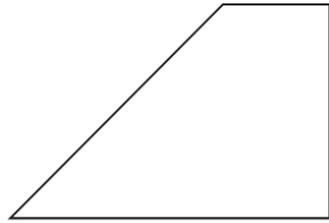
**MAKE SURE THAT EVERY CHILD IS FAMILIAR WITH DOMINOES. THEY SHOULD KNOW HOW TO PLAY DOMINOES.**

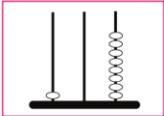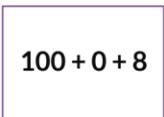**Dominoes used here are of two types. 1) Start to end 2) Loop**

**Start to End – The cards are shuffled and given to the child. She puts the card having START. On the right half of this card there is a picture/problem. The child has to find a card having matching picture or solution of that problem. The right half of that card has a next problem. Thus by putting cards the child has to reach upto the card having an END.**

**LOOP – The child can start with any card and complete the loop.**

Dominoes ensures that the child is solving a number of problems based on each concept while playing the game. If he/she makes a mistake, the loop will not get completed. So, there is space for self-correction. Children do not realise that they are being assessed.

| Activity /Question No. | Baseline question/ Activity (A) | Baseline (A) - Record (You may tick more squares) | Endline question/activity (B) | Endline B record | End line question/ activity (C) | Endline (C) Record |
|---|---|---|---|---|---|---|
| About Q. 1 | Use 4 tangram pieces to make the given shape | | Use 4 tangram pieces to make the given shape | | Use 5 tangram pieces to make the given shape | |
| 1 | Tangram puzzle card 1 (4 pieces) | **Approach** Enthusiastic ☐ Engrossed ☐ Comfortable ☐ | Tangram puzzle card 2 (4 pieces) | **Approach** Enthusiastic ☐ Engrossed ☐ Comfortable ☐ | Tangram puzzle card 3 (5 pieces) | **Approach** Enthusiastic ☐ Engrossed ☐ Comfortable ☐ |

| | | Little awkward ☐ Didn't want to do ☐ **Outcome** Could do it ☐ Could not do it ☐ | | Little awkward ☐ Didn't want to do ☐ **Outcome** Could do it ☐ Could not do it ☐ | | Little awkward ☐ Didn't want to do ☐ **Outcome** Could do it ☐ Could not do it ☐ |
|---|---|---|---|---|---|---|
| About Q. 2 | 1243 2115 5012 2403 2310 1215 | Four-digit Numbers having zeros in units, tens, hundreds etc are to be tested. | | | | |
| 2 | Play four digit currency and numbers dominoes. | Could complete the loop ☐ Could not complete the loop ☐ | | | Play four digit currency and numbers dominoes. | Could complete the loop ☐ Could not complete the loop ☐ |
| About Q. 3 | Translation from numeral to number name and currency | | | | | |
| 3 | Read the number on your card and give those many rupees using | Could read the number ☐ Could not read the number ☐ | Read the number on your card and give those many rupees using | Could read the number ☐ Could not read the number ☐ | Read the number on your card and give those many rupees using | Could read the number ☐ Could not read the number ☐ |

| | | | | | |
|---|---|---|---|---|---|
| | thousand, hundred, ten and one rupee notes (4235) | Could give the amount ☐ <br> Could not give the amount ☐ | thousand, hundred, ten and one rupee notes (3050) | Could give the amount ☐ <br> Could not give the amount ☐ | thousand, hundred, ten and one rupee notes (6008) | Could give the amount ☐ <br> Could not give the amount ☐ |

| About Q. 4 | Amount in currency to number name and written numeral. | | | | | |
|---|---|---|---|---|---|---|
| 4 | Animator gives some rupees (a four digit number – Level A) using 1000, 100, 10 and 1 rupee notes. Children count and say the number and write it. (3546) | Could say the number ☐ <br> Could not say the number ☐ <br> Could write the number ☐ <br> Could not write the number ☐ | Animator gives some rupees (a four digit number – Level B) using 1000, 100, 10 and 1 rupee notes. Children count and say the number and write it. | Could say the number ☐ <br> Could not say the number ☐ <br> Could write the number ☐ <br> Could not write the number ☐ | Animator gives some rupees (a four digit number – Level C) using 1000, 100, 10 and 1 rupee notes. Children count and say the number and write it. | Could say the number ☐ <br> Could not say the number ☐ <br> Could write the number ☐ <br> Could not write the number ☐ |
| About Q. 5 |  | | Understanding three digit numbers in various representation and all forms – 1) Abacus, 2) Currency, 3) Mixed loose forms, 4) Hundreds, Tens and ones 5) Tight form 6) Numeral. <br> It's in the game form. Therefore children do 14 numbers in all these forms to complete the game. These numbers have all types (e g single digit, two digit, three digit having zeros at various places) | | | |
| 5 | Play the card game of three digit numbers in all forms (e.g. 142, | Could do it without help ☐ <br> Could do it with help ☐ | Play the card game of three digit numbers in all forms (e.g. 142, | Could do it without help ☐ <br> Could do it with help ☐ | Play the card game of three digit numbers in all forms (e.g. 142, | Could do it without help ☐ <br> Could do it with help ☐ |

| | | | | | |
|---|---|---|---|---|---|
| | 100+40+2, 1 hundred 4 tens 2 ones, a picture of currency, a picture of abacus) for 3 numbers | Could not do it ☐ | 100+40+2, 1 hundred 4 tens 2 ones, a picture of currency, a picture of abacus) for 3 numbers | Could not do it ☐ | 100+40+2, 1 hundred 4 tens 2 ones, a picture of currency, a picture of abacus) for 3 numbers | Could not do it ☐ |
| **About Q. 6** | Doing 4 digit addition mentally. If children's number sense is strong they will be able to do this. If they can't do it mentally and if they do it using currency, it will give them an idea on how to do it mentally. | | | | | |
| **6** | Read the addition on your card (2300 + 1200). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ | Read the addition on your card (2000 + 306). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ | Read the addition on your card (2500 + 2500). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ |
| **About Q.7** | Doing 4 digit subtraction mentally. If children's number sense is strong they will be able to do this. If they can't do it mentally and if they do it using currency, it will give them an idea on how to do it mentally. | | | | | |
| **7** | Read the subtraction on your card (200 - 80). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ | Read the subtraction on your card (100 – 62). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ | Read the subtraction on your card (500 - 150). What is the answer? Do it using currency notes if necessary. | Could answer mentally ☐ Could answer after doing it using currency Could not answer☐ |

| About Q. 8 | Doing Multiplication problem given in real life context mentally. | | | | | |
|---|---|---|---|---|---|---|
| 8 | What is five times twenty? Use currency if necessary. | Could answer mentally ☐<br>Could show it using currency ☐<br>Could not show it using currency ☐ | What is four times fifty? Use currency if necessary. | Could answer mentally ☐<br>Could show it using currency ☐<br>Could not show it using currency ☐ | What is two times one hundred and thirty?  Use currency if necessary. | Could answer mentally ☐<br>Could show it using currency ☐<br>Could not show it using currency ☐ |
| About Q.9 | Making 1000. How many to be added to a given number to complete 1000? An important milestone. | | | | | |
| 9 | Make 1000 game – I say a number, you say a number to make 1000 (840) | Could do it without counting ☐<br>Could do it by counting ☐<br>Could not do it ☐ | Make 1000 game – I say a number, you say a number to make 1000 | Could do it without counting ☐<br>Could do it by counting ☐<br>Could not do it ☐ | Make 1000 game – I say a number, you say a number to make 1000 | Could do it without counting ☐<br>Could do it by counting ☐<br>Could not do it ☐ |
| About Q. 10 | Tight and loose form of 3 and 4 digit numbers. | | | | | |
| 10 | Make number 200 in 3 possible forms using currency notes of 100, 10 and 1 | Could do it without help ☐<br>Could do it with help ☐<br>Could not do it. ☐ | Make number 200 in 3 possible forms using currency notes of 100, 10 and 1 | Could do it without help ☐<br>Could do it with help ☐<br>Could not do it. ☐ | Make number 1000 in 4 possible forms using currency notes of 1000,  100, 10 and 1 | Could do it without help ☐<br>Could do it with help ☐<br>Could not do it. ☐ |

| About Q. 11 | Doing multiplication mentally when asked in a real life situation. – Concept of multiplication | | | | | |
|---|---|---|---|---|---|---|
| 11 | There are 100 children in each school. There are 4 such schools. How many children in all? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ | There are 200 children in each school. There are 3 schools. How many children in all? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ | There are 150 children in each school. There are 4 schools. How many children in all? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ |
| About Q. 12 | Doing division mentally when asked in a real life situation. – Concept of division | | | | | |
| 12 | Divide 200 rupees equally among two persons. How much does each get ? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ | Divide 200 rupees equally among four persons. How much does each get ? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ | Divide 300 rupees equally among six persons. How much does each get ? | Could answer without help ☐ Could answer with help ☐ Could not answer ☐ |
| About Q. 13 | 63 │ 3 x 2   6 │ 5 x 4<br>20 │ 7 x 2  14 │ 9 x 9<br>81 │ 8 x 7  56 │ 4 x 2<br>8 │ 5 x 9  45 │ 9 x 7 | Being able to do 8 multiplication facts | | | | |
| 13 | Play multiplication Dominoes | Could complete the loop ☐ | Play multiplication Dominoes | Could complete the loop ☐ | Play multiplication Dominoes | Could complete the loop ☐ |

| | | Could not complete the loop ☐ | | Could not complete the loop ☐ | | Could not complete the loop ☐ |
|---|---|---|---|---|---|---|
| **About Q. 14** | $5\,\lfloor 12 \div 3 \quad 4\,\lfloor 18 \div 9$ <br> $2\,\lfloor 42 \div 6 \quad 7\,\lfloor 45 \div 5$ <br> $9\,\lfloor 72 \div 9 \quad 8\,\lfloor 36 \div 6$ <br> $6\,\lfloor 15 \div 5 \quad 3\,\lfloor 40 \div 8$ | Being able to do 8 division facts | | | | |
| 14 | Play division dominoes | Could complete the loop ☐ <br> Could not complete the loop ☐ | Play division dominoes | Could complete the loop ☐ <br> Could not complete the loop ☐ | Play division dominoes | Could complete the loop ☐ <br> Could not complete the loop ☐ |

Special note at the time of baseline :

Special note at the time of endline :