The National
Numeracy *Strategy*
in Cumbria

The Use of Numicon
to support the
Daily Mathematics
Lesson

100 Ideas

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100 things to do with Numicon

RECEPTION

1. Simple sorting of pegs and plates by colour.
2. Simple sorting of plates by pattern.
3. Find a plate that has more/less holes.
4. Find a plate that is larger/smaller.
5. Feel a plate. Find the same one in the feely bag.
6. Find a particular plate in the feely by touch only.
7. Use the plates to make a pattern eg. 1, 4, 1, 4, etc.
8. Teacher makes a pattern using 3 - 4 plates. Child to copy.
9. Order plates by size.
10. Find the plate that is equivalent size to 2 smaller ones. How many ways can you find?
11. Choose a plate. Find the equivalent amount of counters.
12. Matching cards to plates - set of cards with plate on each. Take turns to pick a card and match to plate.
13. Make a picture - house/train/face, etc.
14. Find a plate that is 1 more/1 less.
15. Display number line, children make own number line by matching plates. Start using number names.
16. Independent activity - matching plates to number cards.
17. Order a handful of plates.
18. Give children an amount of counters find the matching plate.
19. 2 plates, which is more/less?
20. 2 plates different sizes. Which additional plate will make them the same?
21. Hand out plates. If you have a 5/10 etc. stand up.
22. Hand out plates. If you have a plate less than 6 stand up.
23. Hand out plates. Find a partner to make 5.
24. Give me the number 4, etc in plates.
25. Give me the number 10, etc in plates.

YEAR ONE

26. Can you make each individual number another way with the plates (bonds)?
27. Choose a plate and the right number of pegs eg. 7. Take away an amount. How many left? (subtraction).
28. Choose a plate eg 7 use 2 plates to make the amount (3 and 4). Remove 1 of the plates and place on original plate. How many left? (subtraction).
29. Arrange the plates in order. Go along line adding the '1' plate to each. How many now? (add 1)
30. Put plate down eg. 10. Put 10 pegs in. Ask child to remove 3. Find plate that matches the amount left. (sub).
31. Make pattern with pegs beside plate. Take away required amount of pegs and find plate that matches amount left (sub).

32. Find 2 plates the same eg. 3 and 3 and put them together. Put pegs in. Find plate that fits over pegs (doubles).
33. Choose a plate eg. 8 and put the right amount of pegs in. Can you find 2 plates the same size that fit over the pegs? (doubles)
33. Chose a plate eg. 8 and put the right amount of pegs in. Can you find 2 plates the same size that fit over the pegs? (doubles)
34. Find a plate eg. 10. Find 2 smaller boards that fit on to it. Take one board away. How many left? (introduce half).
35. Throw dice and take plate until total exceeds 10. Match amount with a 10 plate and other required amount (T.Us)
36. Children choose 2 plates with total more than 10. Match pattern made with a 10 plate and other required amount.
37. Use 3 plates to make 20 in lots of different ways.
38. Illustrate the 'teen number line' using plates and peg for each number.
39. Make 3D representations of 'teen' numbers.
40. Use plates to illustrate 'the difference' between numbers. "10 more, 10 less" activities.
41. Number patterns - eg in 2s, 3s, 5s, etc.
42. Basis of multiplication eg. how many '2' plates to make...... ?
43. Adding 9 - show 10 as (9 + 1) plates.
44. Adding 11 - show 11 as (10 and 1) plates.
45. Make 3D representations of larger numbers eg 46 (4x10x6).
46. 1. Take white patterned overlay. Children complete as required.
47. 2. Use plastic base board and use tiles to "make a picture" that covers whole board.
48. 3. Blank overlays. Children draw round own arrangement of tiles that cover boards.
49. 4. Laminate for later use.
50. "Battle plates" 2 children, 1 base board each. First child places plate on board, second child places plate in same site on their board. Second child shadows first till complete then change over.
51. Symmetry activities using plates only, pegs only, pegs and plates.
52. How many squares can you make using 4 posts on base board. Record number sentence.
53. How many different rectangles can you make using plates - record number sentence to describe.
54. Doubles - I have 1 yellow plates. Which plate can I change them for?
55. I have one red plate. Give me the double.
56. Number bonds. Make 10 using 2 plates. Group activity - put in middle - no duplication.
57. What shape can you make with 2 yellow plates. What shape with a 4, 6, 8 plates. Can you make a square with a 4, 6, 8 plates.
58. What shape can you make with 1 red and 1 orange?
59. Which shapes will make squares?
60. I'm thinking of a number with 1 green and 1 yellow plate. What is it?
61. Choose 2 or more plates. Children ask questions requiring yes/no eg. is one plate red?

62. Make a square with plates. Make the same square with different plates. Make a bigger square.
63. What shape do you make when you put, for example, 2 and 4 together?
64. 'Nearest 10' activities eg. 14 illustrate 20 and 10 with plates. Which is nearest to?
65. Use white base board to illustrate simple fractions - eg. how many 10s to cover ½ the board.
66. Use 3 plates to make, for example, 10 and record number sentence.
67. Add 3 numbers in any order. Use 3 plates to illustrate.
68. Data Handling - use white base board and pegs for simple bar charts and cover with appropriate plates to record amounts.
69. Position 'missing' plates on number line and make that number using various combinations of plates eg. a 'missing 5' replaced by 3 and 2, 4 and 1, etc.
70. Share plates (1 - 5) equally between 4 children. Children throw dice (to 5) and remove appropriate plate from own pile. As pile decreases numbers have to be made up eg. 3 + 1 for 4.
71. Use 3 plates to illustrate 3 times tables.
72. Teacher has bag with plates eg. 1 - 5. Guess which plate the teacher will extract - probability.
73. 1 child gets handful of pegs. Other child holds up estimated plate. Is it more/less than correct amount.
74. Empty feely bag - all pegs in middle of circle. One child picks up some pegs, count them into bag. Repeat with child 2, 3, 4. How many pegs in bag?
75. Empty feely bag - all pegs in middle of circle. One child picks up some pegs count them into bag. Collect equivalent plate. Repeat with child 2, 3, 4. How many pegs, look at plates collected for support.
76. Give 'target' number eg 16. First child lays out own choice tile eg. 9. Next child has to 'make up to 16'. Knocks a la dominoes if unable to do so!
77. As above, except change target number after each number has been completed.
78. Use tiles to illustrate 'odd' and 'even' eg. sort tiles into odds and evens. Use to investigate numbers added together always make an even number.
79. How can you change an odd number with an even number?

MORE ABLE/YEAR 2

80. Position cards with instructions: start at bottom left corner right 3 up 2, put in a blue peg. Count right, 2 down, 1 put in a red peg, etc.
81. Change base to 10. So can now work beyond 100.
82. Rotation - use for example the 3 tile to illustrate rotation. Child shadows teacher, how many turns to get back to original position.
83. I have 3 blue plates. Take away 1 green, how many would be left?
84. Use 5 plates to make target number eg. 45.
85. Using base as 10, how many plates to make 100s.
86. Use random set of plates. How many? Sort into 10s.
87. Give child 2 piles of plates. Find out which pile is more/less.
88. Give child 3 piles of plates. Find out how many and order piles.

89. Dice numbered (2 x 10) (2 x 5) (2 x 1). Roll dice x 2 - nearest to 100 minutes. Can't go beyond 100.
90. Start with board covered with random plates. Dice (1-6) roll both. Remove plates as appropriate.
91. Start with 5 x 10 plates in pile. Throw dice (eg 12). Remove 2 x 10 and replace an 8. Challenging! place value.
92. Use plates to introduce strategy - partitioning and recording eg. 9 + 8 is the same as (5 + 4) and (5 + 3).
93. Reflective symmetry on 1 white board using plates.
94. As above but use 2 white boards for larger scales.
95. Present 3 tiles. Can you find another 3 that would balance these?
96. Repeated addition of 4s - basis for 4 x tables.
97. Give tiles out to group - one per child. Get into 3s or 4s. Whose group has the biggest/smallest total?
98. Use Numicon set to make interactive displays.
99. Can you make a 3 digit number with the tiles?
100. Space for your own idea!!!!