



Add while you Play



Let us play the game of addition

- Make groups of children having four children in each.
- Write any number from 15 to 20 in your notebook.
- Throw the dice one by one. Then pick up as many pebbles as the number on the dice.
- The person who will be able to first collect the number of pebbles equal to the number written in the notebook will be the winner.



Teena wrote 18 on her notebook. She threw dice and got 4 in her first attempt. She picked 4 pebbles from the heap and put them aside. She threw dice again. This time she got 3. She picked up 3 pebbles. Similarly she got 5 in third and 6 in fourth attempt. She put aside all these pebbles also. Now she added all the pebbles kept aside. The total number of pebbles after addition is-

$$4 + 3 + 5 + 6 = 18$$

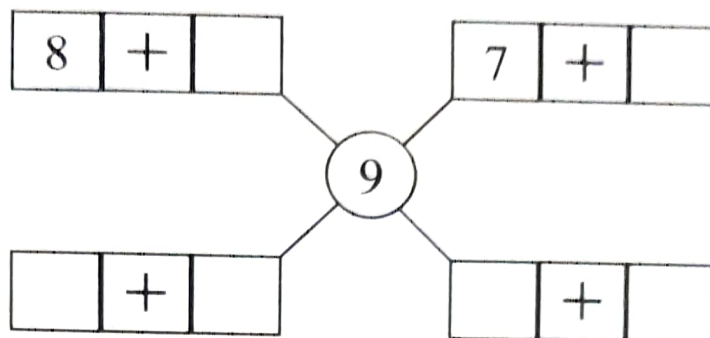
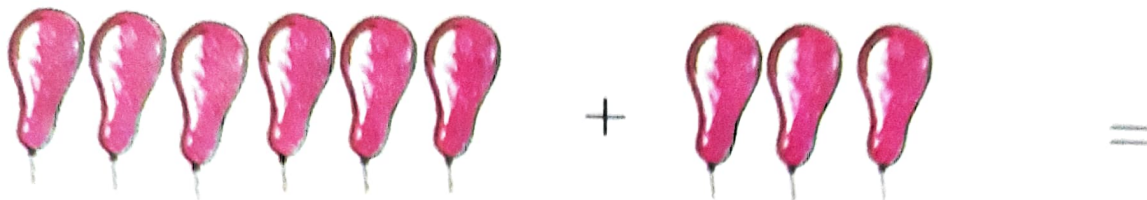
Gopi also threw the dice and collected the pebbles -

$$2 + 1 + 5 + 6 + 4 = 18$$

- Children, you also play like this. Then add and see, who among you reaches first to the written number?
- Play this game in other ways also. As- make them throw two dice and ask to pick the pebbles equal to the total of numbers on both the dice.



See below and solve-



I have 14 toffees



I have 21 toffees

How many toffees are with Shama and Raunak?

Let us solve -

First method - Put all the toffees together. Then make heaps containing 10 toffees in each.



10 toffees



10 toffees



10 toffees



5 toffees

Total number of toffees are 35

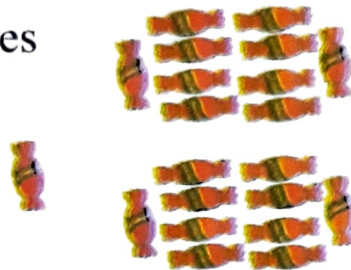
Second method - Make separate heaps of 10 toffees each from the toffees of Shama and Raunak.

Number of Shama's toffees
14



One heap of 10 toffees and 4 separate toffees

Number of Raunak's toffees
21



Two heaps of 10 toffees and 1 separate toffee

Total number of toffees with Shama and Raunak is 35

heap	toffee
Tens	Ones
1	4
+ 2	1
3	5

Look and solve-

17	-		→	17	1 Tens	7 Ones
+ 21	-			+ 21	2 Tens	1 Ones
38				38	3 Tens	8 Ones

41		Tens		Ones
+ 36		Tens		Ones
		Tens		Ones

➤ Encourage the children to add by their own methods too.

$$\begin{array}{r} \text{T} \quad \text{O} \\ 8 \quad 2 \\ + 1 \quad 5 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 3 \quad 4 \\ + 5 \quad 2 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 5 \quad 3 \\ + 3 \quad 5 \\ \hline \hline \end{array}$$

Add ones with ones, and tens with tens. In the next step similarly add hundreds with hundreds.

Do it yourself-

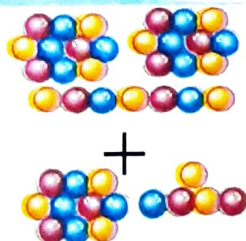
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 4 \quad 2 \\ + 3 \quad 1 \quad 5 \\ \hline \hline 4 \quad 5 \quad 7 \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 3 \quad 7 \\ + 6 \quad 5 \quad 2 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 6 \quad 0 \quad 0 \\ + 2 \quad 0 \quad 1 \\ \hline \hline \end{array}$$

Gopi has done the addition of carry over

$$\begin{array}{r} 2 \quad 7 \\ + 1 \quad 5 \\ \hline 4 \quad 2 \end{array}$$



Gopi picked up 27 marbles first. He again picked up 15 marbles

Then he made groups containing 10 marbles in each as-



A total of four groups of 10 marbles each are made, and two marble are left.

Thus Gopi got-

$$4 \text{ tens and } 2 \text{ ones} = 40 + 2 = 42$$

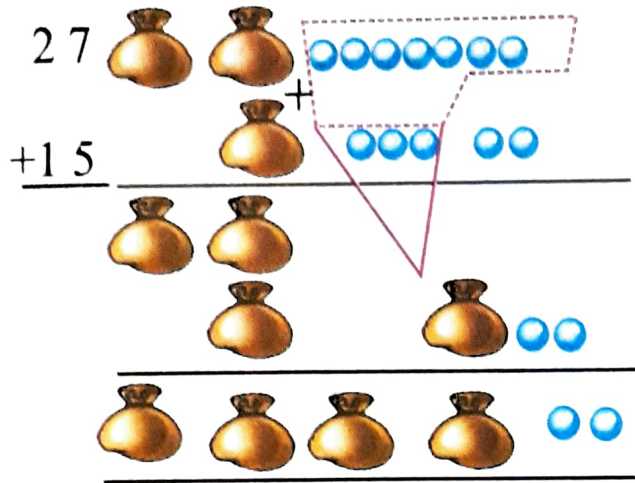
Gopi added it like this also-



Packet of 10 marbles

First he added ones with ones then added tens with tens.

Look-



$$\begin{array}{r}
 7 \text{ Ones} \\
 + 5 \text{ Ones} \\
 \hline
 12 \\
 \text{① carry over}
 \end{array}
 = 1 \text{ T} + 2 \text{ O}$$

$$\begin{array}{r}
 27 \\
 + 15 \\
 \hline
 2
 \end{array}
 \rightarrow
 \begin{array}{r}
 27 \\
 + 15 \\
 \hline
 42
 \end{array}$$

Now, add with the help of bundle and matchsticks-

T O		T O		T O
$ \begin{array}{r} 26 \\ + 39 \\ \hline \end{array} $		$ \begin{array}{r} 26 \\ + 39 \\ \hline 5 \end{array} $		$ \begin{array}{r} 26 \\ + 39 \\ \hline 65 \end{array} $

Now, add 478 and 359-

$$\begin{array}{r}
 \text{H} \quad \text{T} \quad \text{O} \\
 4 \quad 7 \quad 8 \\
 + 3 \quad 5 \quad 9 \\
 \hline
 \hline
 \end{array}$$

First add ones and make groups.

$$8 + 9 = 17 \text{ ones} = 1 \text{ T} + 7 \text{ O}$$

Keep the 1 tens as carry over with the tens.

$$\begin{array}{r}
 \text{H} \quad \text{T} \quad \text{O} \\
 4 \quad \text{①} \quad 8 \\
 + 3 \quad 5 \quad 9 \\
 \hline
 \hline
 7
 \end{array}$$

Add tens and make groups

$$1 + 7 + 5 = 13 \text{ tens} = 1 \text{ H} + 3 \text{ T}$$

Keep the 1 hundred as carry over with the hundreds.

	H	T	O
	①	①	
	4	7	8
+	3	5	9
		3	7

Add hundreds

$$1 + 4 + 3 = 8$$

	H	T	O
	①	①	
	4	7	8
+	3	5	9
	8	3	7

$$478 + 359 = 837$$

H	T	O
①	①	
4	7	8
+	3	5
8	①3	①7



We have Learnt



- Ones is added with ones, tens with tens and hundreds with hundreds.
- When the sum of ones is 10 or more than this, we add the tens as carry over of ones with tens. Ones is written below the ones. Likewise, we add carry over of tens, with the digit of hundreds.
10 Ones = 1 Tens 10 Tens = 1 hundreds
- When, how many, how much is total, etc. are asked, then we add the numbers.

Exercise



$$\begin{array}{r} 1- \quad 2 \quad 6 \\ + \quad 4 \quad 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad 7 \quad 6 \\ + \quad 8 \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad 2 \quad 4 \quad 8 \\ + \quad 5 \quad 3 \quad 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad 5 \quad 1 \quad 6 \\ + \quad 3 \quad 7 \quad 6 \\ \hline \\ \hline \end{array}$$

2	1	5		2	4		1	5	2		4	1	7
	2	2		6	6		2	2	3		1	2	4
+	5	2		+	4	8	+	4	1	3	+	2	4

3- Fill in the blanks-

4	6	9		2	1	7		3	7	
+	...	2	3	+	5	...	2	+	5	 8
7	...	2		...	0	9		...	3	4

4- Match the correct pairs-

1 3 4 + 2 6 5 + 7 2	=	5 2 5
5 0 0 + 2 5	=	4 7 1
6 0 0 + 9 0 + 2	=	4 7 3
4 H + 7 T + 3 O	=	6 9 2

5- Amit has 15 pencils, Garima has 20, and Rahman has 11 pencils. How many pencils are there in total?

6- There are 567 guavas in a box and 296 guavas in another box. How many guavas are there in both the boxes?

7- There are 348 boys and 284 girls in a school. How many students are there in the school?

➤ Make the students understand that the tens gained by addition of ones written over the tens and hundreds gained by the addition of tens is written over the hundreds and added.