Overview of Strategies for Learning Addition Facts • Notes for Families

Doubles

Doubles are facts where the numbers you are adding together are the same number.

Doubles	0 + 0 = 0	1 + 1 = 2	2 + 2 = 4	3 + 3 = 6	4 + 4 = 8	5 + 5 = 10
	6 + 6 = 12	7 + 7 = 14	8 + 8 = 16	9 + 9 = 18	10 + 10 = 20	

Memorizing these facts will pay off later! They are usually easy for children to memorize - make practice times fun with the games in this booklet. Be sure your child knows what a double is. It is helpful to point out doubles that you see around you - like 5 fingers on each hand or the 2 rows of 6 in an egg carton.

Doubles + 1

Doubles + 1 are facts where the numbers you are adding together are one away from each other, like in counting. Doubling the smaller number and adding on one more is one way to get the answer for these facts.

Doubles + 1	0 + 1 = 1	1 + 2 = 3	2 + 3 = 5	3 + 4 = 7	4 + 5 = 9	5 + 6 = 11
	6 + 7 = 13	7 + 8 = 15	8 + 9 = 17	9 + 10 = 19		
	Remember to practice facts both ways - e.g. 6 + 7 = 13 and 7 + 6 = 13					

This is a key group. Many addition errors occur with problems in this group when students have had drill and practice in a more traditional mode.

Be sure your child understands why they can just double the smaller number and add 1 on to that total. Use things around the house to make a set. Make another set of the same things with one more thing in it. Have your child show that the same number is in each set with just one more in the second set. So if they know the doubles total, he/she just has to add on one more to have the total for both sets.

Here's a picture of how this strategy works.

x x x x x x 6
x x x x x x x +7

6 + 6 = 12 + 1 = 13

Doubles + 2

Doubles + 2 are facts where the numbers you are adding together are two away from each other. Doubling the smaller number and adding on 2 more is one way to get the answer for these facts.

Doubles + 2 (or Sharing)	0 + 2 = 2	1 + 3 = 4	2 + 4 = 6	3 + 5 = 8	4 + 6 = 10	5 + 7 = 12
	6 + 8 = 14	7 + 9 = 16	8 + 10 = 18			
	Remember to practice facts both ways - e.g. 6 + 8 = 14 and 8 + 6 = 14					

Here's a picture of how this strategy works:

x x x x x x 6
x x x x x x x x +8

6 + 6 = 12 + 2 = 14

These facts are also known as the sharing group. When numbers are 2 away from each other it is just like one person having 2 more things than another person. If the person who has more gives one of his/her things to the other person, he/she has one less and the other person has one more. Then they will have the same number and if you just double that number you know how much they have together. You double the number between the two numbers that are 2 away from each other. E.g. If one person has 8 things and the other person has 6 and the person with more gives one thing to the other person, they now both have 7 things [(8-1) and (6+1)]. Double 7 and you get 14, the same as 8 + 6. Help your child practice this strategy with markers or small objects or even while you are eating a bowl or popcorn or some other food where you can count pieces.

Here's a picture of how sharing works:

6 x x x x x x
+8 x x x x x x x (x)
14

with sharing looks like: x x x x x x x 7
x x x x x x x +7
14

Adding 0 and Adding 1

These are the facts where you are adding either 0 or 1 to a number. They are usually easy for children to learn but sometimes get harder when they learn what 0 and 1 do in multiplication. Having your child think of a story usually helps. E.g. If you have 2 cookies and get no more (+ 0), how many do you have? You still have just 2 cookies.

Adding 0 and 1	*0 + 0 = 0	*1 + 0 = 1	*2 + 0 = 2	3 + 0 = 3	4 + 0 = 4	5 + 0 = 5
	6 + 0 = 6	7 + 0 = 7	8 + 0 = 8	9 + 0 = 9	10 + 0 = 10	
	*0 + 1 = 1	*1 + 1 = 2	*2 + 1 = 3	*3 + 1 = 4	4 + 1 = 5	5 + 1 = 6
	6 + 1 = 7	7 + 1 = 8	8 + 1 = 9	9 + 1 = 10	10 + 1 = 11	
	Remember to practice facts both ways - e.g. 7 + 0 = 7 and 0 + 7 = 7					

Adding 10 and Adding 9

These are the facts where you are adding either 10 or 9 to a number.

Adding 10 and 9	*0+10=10	*1+10 = 11	2+ 10 = 12	3+ 10 = 13	4+ 10 = 14	5+ 10 = 15
	6+ 10 = 16	7+ 10 = 17	*8+10=18	*9+10=19	*10+ 10 = 20	
	*0+ 9 = 9	*1+ 9 = 10	*2+ 9 = 11	3+ 9 = 12	4+ 9 = 13	5+ 9 = 14
	6+ 9 = 15	*7+ 9 = 16	*8+ 9 = 17	*9+ 9 = 18	*10+ 19 = 19	
	Remember to practice facts both ways - e.g. 7 + 9 = 16 and 9 + 7 = 16					

Adding 10 to a number makes a pattern that is easy to remember - the number you are adding to 10 appears in the ones place and the ten becomes the "1" in the tens place.

The number 9 is just one less than ten so when you add 9 to a number you get one less than if you were adding 10 to the number. Practice with the games in this packet will help lock these patterns in place.

Using What You Know

These are the facts that are left over after your child masters all the groups above. They are the other group that your child will have to memorize. If memorizing is hard, since at least one of the numbers is a small one, your child can always put the big number in his/her head and "count on" for adding on the other number. E.g. for 2 + 6 – think "6" in your head and "count on" two more numbers – 6 then 7 – 8 – that's the answer! Most children can count on small amounts as quickly as recalling a memorized answer.

UWYK (Using What You Know)	2 + 5 = 7	2 + 6 = 8	3 + 6 = 9	2 + 7 = 9	3 + 7 = 10	4 + 7 = 11
	2 + 8 = 10	3 + 8 = 11	4 + 8 = 12	5 + 8 = 13		
Remember to practice facts both ways – e.g. 8 + 5 = 13 and 5 + 8 = 13						