

Addition Strategies for Grade 2

Addition Strategy

Making Friendly Numbers

$47+35 =$

"If I take 5 from 47 put that 5 with the 35, I make the friendly number of 40. $40+40+2=82$."

Making Friendly Numbers can involve the "Making Ten" or making "Doubles" or "Doubles Plus One" strategies learned in grade one. More information can be found starting on page 62 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number Talks utilizing these strategies can be found starting on page 121.

Addition Strategy

Compensation

$47+35 =$

$47+35$
 $50+32=82$

"I took 3 from 35 and gave it to 47 to make 50, which is a friendly number, and then had $50+32$ which is 82."

This strategy is very similar to Making Friendly Numbers. More information can be found on page 62 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number Talks utilizing this strategy can be found starting on page 137.

Addition Strategy

Decomposing Both Numbers

$47+32 =$

$47 + 32$
 $(40+7) + (30+2)$
 $40+30=70$
 $7+2=9$
 $70+9=79$

"I write each number in expanded form. Add the tens and then the ones. Then add the two answers together"

This strategy is sometimes known as the Split Strategy or Breaking Each Number into Its Place Value. When students understand place value this is a first go to strategy they might use. Each addend is broken into its expanded form and then combined. Typically, children work left to right as it maintains the magnitude of numbers. More information can be found on page 63 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number Talks utilizing this strategy can be found starting on page 133.

Addition Strategy

Decomposing Both Numbers

$47+32 =$

$47 + 32 = 79$
 $70 + 9 = 79$

"I write each number in expanded form and then add each of the tens and then the ones."

This is another way of recording this strategy.

Addition Strategies for Grade 2

Page 2

Addition Strategy

Decomposing One Addend

$47+32=$

$47 + 32 = 79$

 $47+30=77$
 $77+2=79$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

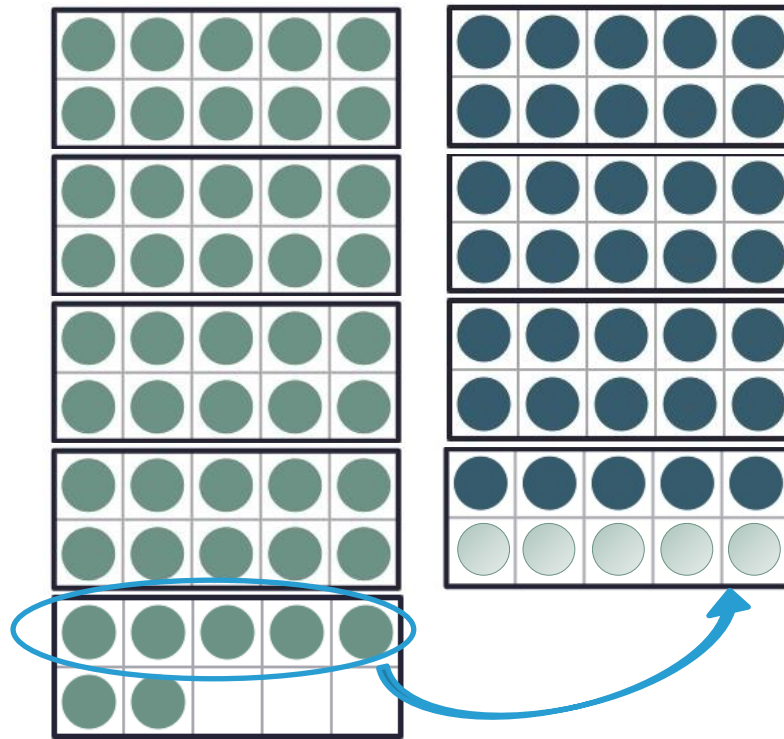
"I broke 32 into 30 and 2 and then added 47+30 to make 77, and then added 2 more to get 79."

This is more efficient than Decomposing Both Numbers and is sometimes known as Adding Up in Chunks. It keeps one addend whole and breaks the other into friendlier chunks by place value. The Hundred Chart and the Open Number Line are great tools for illustrating this strategy. More information can be found on page 64 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number Talks utilizing this strategy can be found starting on page 141.

Addition Strategy

Making Friendly Numbers

$$47 + 35 =$$

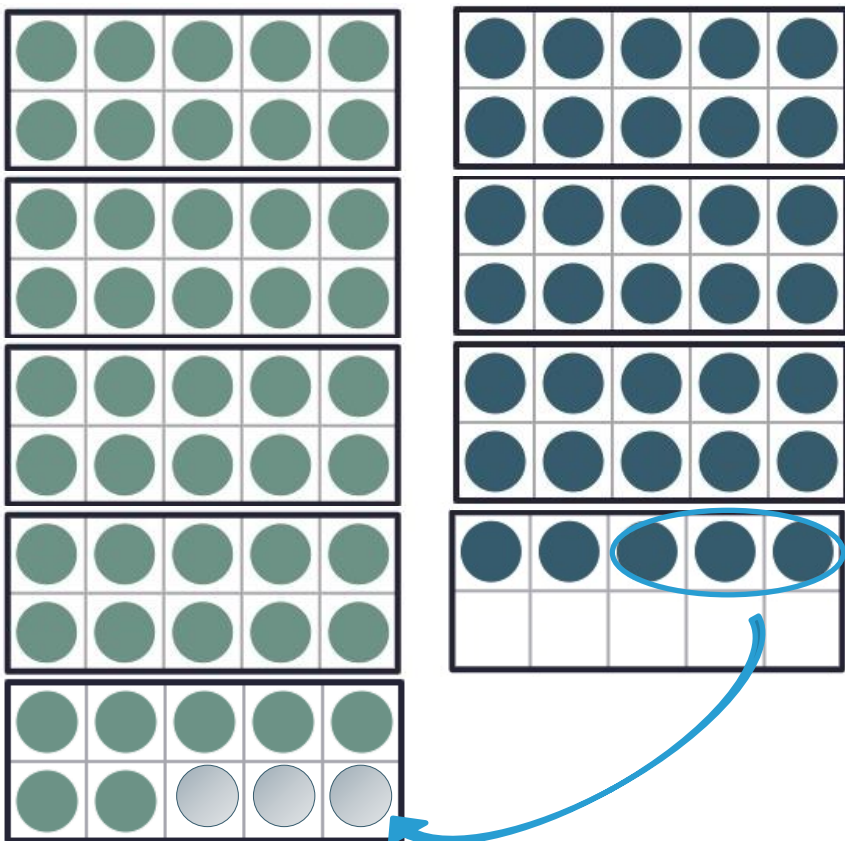


“If I take 5 from 47 and put that 5 with the 35, I make the friendly number of 40. $40 + 40 + 2 = 82$.”

Addition Strategy

Compensation

$$47 + 35 =$$



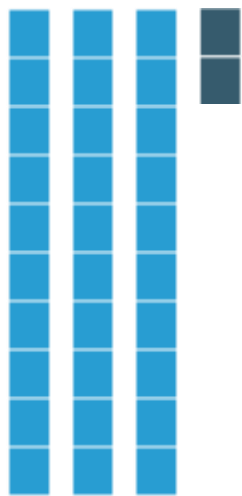
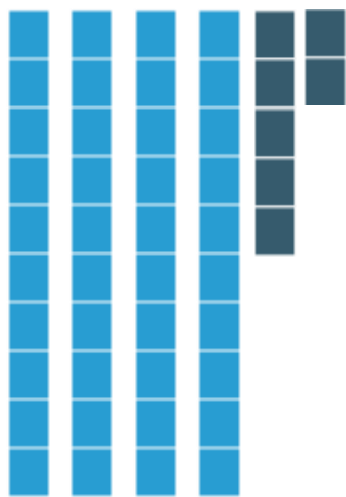
$$\begin{array}{r} +3 \\ \cancel{47} + \cancel{35} \\ 50 + 32 = 82 \end{array}$$

"I took 3 from 35 and gave it to 47 to make 50, which is a friendly number, and then had 50+32 which is 82."

Addition Strategy

Decomposing Both Numbers

$$47 + 32 =$$



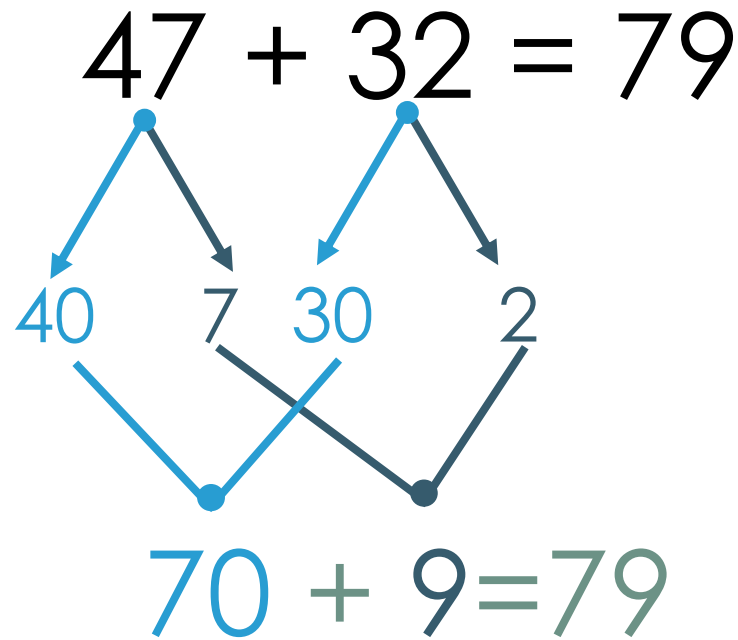
$$\begin{array}{r} 47 + 32 \\ (40+7) + (30+2) \\ 40+30=70 \\ 7+2=9 \\ 70+9=79 \end{array}$$

"I write each number in expanded form. I add the tens and then the ones. Then add the two answers together"

Addition Strategy

Decomposing Both Numbers

$$47 + 32 =$$



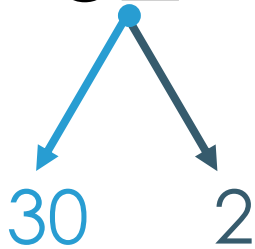
"I write each number in expanded form and then add each of the tens and then the ones."

Addition Strategy

Decomposing One Addend

$$47 + 32 =$$

$$47 + 32 = 79$$



$$47 + 30 = 77$$

$$77 + 2 = 79$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

"I broke 32 into 30 and 2 and then added $47 + 30$ to make 77, and then added 2 more to get 79."