Table of Contents

Tier Instructions and Information pages precede the beginning of each tier.
Be sure to read the Tier Instructions and Information pages before assigning worksheets!

Answers are provided on the reverse side of the Tier Instructions and Information pages.

Introduction

Two Plus Two is Not Five, Easy Methods to Learn Addition and Subtraction, is a practical, supplementary workbook to teach the addition and subtraction facts to students, and includes tricks from my first book, *How to Teach Math Facts,* published in 1999 by Teacher Created Resources. The purpose of both books is to help students memorize the math facts. *Two Plus Two is Not Five* introduces the addition and subtraction facts with many easy-to-learn tricks and provides extensive practice opportunities, because mastery of basic math facts is essential for success in computation skills and solving word problems.

The math tricks and their respective practice pages are arranged in a format that is useful to ★ parents, ★ classroom teachers, ★ home schooling educators, ★ resource room teachers, and ★ tutors.

Teachers and parents will find that this is suitable for learners of any age who need to master the basic addition and subtraction facts. For this reason, the workbook pages were intentionally not designed for a particular grade level.

The 232 reproducible practice pages will appeal to:
- Beginners
- Elementary school children needing instruction, practice, or review of the math facts
- Children in remedial programs
- Children in accelerated programs who need to memorize math facts
- Children with math disabilities
- Older students who still struggle because they just never memorized the math facts

---

Parents and teachers will appreciate how easy it is to facilitate the learning process for children.

- Self-explanatory pages are straightforward to administer.

- Lessons can be easily individualized for different learning abilities.

- Most of the pages are divided into two sections so that half sheets can be easily assigned. This will be beneficial for very young learners or those intimidated by a whole page of math to do!

- Math fact cards are assigned to go along with the practice pages.

- Children will remember answers to the addition and subtraction facts because they are learning the tricks, doing written math practice, and reviewing with the math fact cards.

- Math assignments will be completed with confidence and children will enjoy their success.

Name _____

TRICK   <u>Count by 2s</u> or <u>2 Ladder</u>

| **2** | **4** | **6** | **8** | **10** |

Practice **Count by 2s**.

2, 4, 6, 8, ____   2, 4, ____, 8, 10

2, ____, 6, ____, 10   2, 4, ____, 8, ____

____, 4, 6, ____, ____   2, ____, ____, ____, 10

Count up by 2-steps.
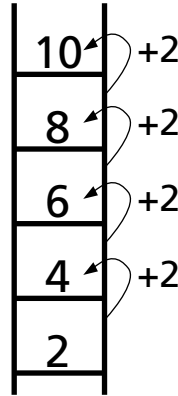
```
| 10 |  ⤷ +2
|  8 |  ⤷ +2
|  6 |  ⤷ +2
|  4 |  ⤷ +2
|  2 |
```

Try <u>2 Ladder</u> addition.

2	4	6	8	6	4	8
+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2

↑
(This is also <u>Doubles</u>.)

LOOK. These are the same.

4	▢▢▢▢		2	▢▢
+ 2	▢▢		+ 4	▢▢▢▢
6			6	

6	2	4	2	8	2	2
+ 2	+ 6	+ 2	+ 4	+ 2	+ 8	+ 6

Name _____

Practice **2 Ladder** and **Doubles**.

2 + 8	4 + 4	4 + 2	1 + 1	4 − 2	6 + 2	2 + 4
3 + 3	6 − 3	5 + 5	8 + 2	4 + 4	2 + 4	8 + 2
2 + 6	4 + 2	2 + 8	4 − 2	6 + 2	6 − 3	2 + 2
2 + 4	8 + 2	2 + 6	6 + 2	8 − 4	10 − 5	2 + 6

Practice **2 Ladder**, **Backwards 1**, and **Number +1**.

6 + 2	8 + 2	5 − 1	1 + 4	8 − 1	6 − 1	4 + 2
2 + 8	1 + 7	6 + 1	1 + 2	2 + 6	9 − 1	1 + 5
8 + 1	2 + 4	10 − 1	3 − 1	4 + 2	8 + 2	2 + 6
1 + 3	2 − 1	6 + 2	4 − 1	2 + 8	9 + 1	2 + 4

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction **23**

Name _____

TRICK Rhymes or Count by 3s

Say: Three, six, nine! Who do you think is mighty fine?

3   6   9

Learn

3	6	9	9
+ 6	+ 3	− 3	− 6
9	9	6	3

3	6	3	3	9	3	3
+ 6	+ 3	+ __	+ 6	− 3	+ __	+ 6
9		9			9	

6	6	9	6	9	9	6
+ 3	+ __	− 6	+ 3	− 6	− 3	+ 3
	9					

Practice **Count by 3s**, **Number +1**, and **Backwards 1**.

9	1	3	8	6	9	9
− 3	+ 2	+ 6	− 1	+ 3	+ 1	− 6

3	10	9	9	4	4	3
− 1	− 1	− 6	− 1	+ 1	− 1	+ 6

9	9	1	6	5	9	7
− 6	− 3	+ 6	+ 3	− 1	− 3	+ 1

3	1	6	9	1	5	1
+ 6	+ 3	+ 3	− 6	+ 7	+ 1	+ 8

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction

Name _____

Practice **Count by 3s** and **Zero**.

| 9
− 3 | 6
+ 3 | 5
− 0 | 3
+ 6 | 0
+ 4 | 4
− 4 | 9
− 6 |

| 3
+ 6 | 7
+ 0 | 2
− 2 | 6
+ 3 | 9
− 3 | 0
+ 5 | 3
+ 6 |

| 3
+ 0 | 9
− 6 | 0
+ 8 | 9
− 3 | 5
− 5 | 6
+ 3 | 9
− 0 |

| 9
− 6 | 6
− 6 | 3
+ 6 | 3
+ 0 | 6
+ 3 | 9
− 3 | 9
− 9 |

Practice **Count by 3s** and **Right Next to Each Other**.

| 3
+ 6 | 9
− 3 | 9
− 8 | 9
− 6 | 6
+ 3 | 5
− 4 | 6
+ 3 |

| 9
− 6 | 8
− 7 | 3
− 2 | 9
− 3 | 3
+ 6 | 7
− 6 | 9
− 6 |

| 10
− 9 | 6
+ 3 | 9
− 3 | 6
− 5 | 9
− 6 | 4
− 3 | 3
+ 6 |

| 2
− 1 | 9
− 3 | 7
− 6 | 3
+ 6 | 9
− 8 | 6
+ 3 | 8
− 7 |

Name _____

TRICK 2 Ladder Subtraction

10 –2
8 –2
6 –2
4 –2
2

Count down by 2-steps.

What is on the step below?

<u>10</u> <u>8</u> <u>4</u> <u>10</u> <u>6</u> <u>8</u> <u>4</u> <u>6</u>

___ ___ ___ ___ ___ ___ ___ ___

Try 2 Ladder Subtraction.

10	8	10	6	10	8	6
– 2	– 2	– 2	– 2	– 2	– 2	– 2

8	4	6	10	8	6	4
– 2	– 2	– 2	– 2	– 2	– 2	– 2

↑ (This is also Doubles Subtraction.)

Practice 2 Ladder.

6	10	8	8	6	2	10
+ 2	– 2	+ 2	– 2	– 2	+ 6	– 2

6	2	2	6	4	8	6
– 2	+ 4	+ 8	– 2	+ 2	– 2	+ 2

2	10	2	8	4	6	8
+ 2	– 2	+ 6	– 2	– 2	– 2	– 2

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction **69**

Name _____

Practice **2 Ladder** and **Magic 9**. (Circle) **2 Ladder**.

2 + 6	9 + 6	8 − 2	4 + 9	8 + 2	10 − 2	6 − 2
2 + 4	2 + 9	9 + 9	8 − 2	7 + 9	6 + 2	5 + 9
10 − 2	9 + 8	2 + 8	4 − 2	6 + 2	9 + 4	8 − 2
6 − 2	8 + 2	6 + 9	6 − 2	9 + 3	10 − 2	2 + 6

Practice **2 Ladder** and **Zero**.

4 + 2	10 − 2	6 − 0	2 + 8	3 − 3	0 + 1	2 + 6
6 − 2	7 + 0	2 + 4	6 − 2	8 + 2	4 − 0	8 − 2
10 − 2	4 − 2	0 + 8	6 + 2	10 − 2	6 − 2	5 − 0
9 − 9	2 + 4	2 + 8	8 − 2	2 + 0	2 + 6	8 − 2

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction

Tier 4

Instructions and Information

Start with any trick. The tricks may be introduced in any order except:

- All the **<u>Big Subtraction</u>** sets of facts should be taught in the given sequence, but each set does not immediately have to follow the set before it.

Page	Trick	Math fact cards to be assigned:
97-100	**<u>Straight Lines</u>**	4+7, 7+4, 11-4, 11-7
101-104	**<u>Family Partners</u>**	9-4, 9-5
105-108	**<u>Number in the Middle</u>**	5+7, 7+5, 6+8, 8+6
109-110	**<u>Big Subtraction</u>**	17-8, 17-9
111-112	**<u>Big Subtraction</u>**	16-7, 16-9
113-115	**<u>Big Subtraction</u>**	15-6, 15-9
116-117	**<u>Big Subtraction</u>**	14-5, 14-9
118-119	**<u>Big Subtraction</u>**	13-4, 13-9
120-121	**<u>Big Subtraction</u>**	12-3, 12-9
122-124	**<u>Big Subtraction</u>**	11-2, 11-9
125-134	**Review Pages**	

Name _____

TRICK Number in the Middle with Doubles

What fits in the middle?

4 _____ 6   7 _____ 9   8 _____ 6   5 _____ 7

6 _____ 8   5 _____ 3   7 _____ 5   9 _____ 7

LOOK. This is the same.

6	8	5	9	6	7
◯	◯	◯	◯	◯	◯
4	6	7	7	8	5
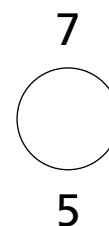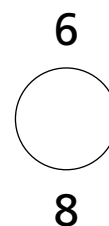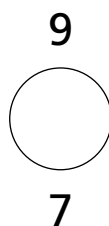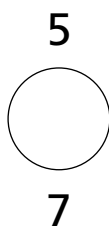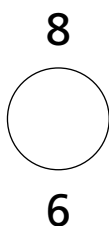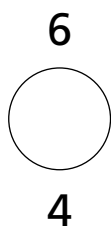
Learn **Number in the Middle** with **Doubles**.

5 _____ 7

$\begin{array}{r} 5 \\ \cdots \\ + 7 \\ \hline 12 \end{array}$ ⟶ 6 fits in the middle.
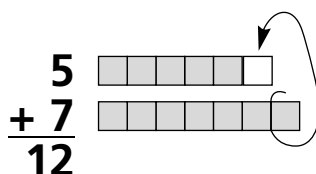
$\begin{array}{r} \mathbf{5} \\ + \mathbf{7} \\ \hline \mathbf{12} \end{array}$ $\begin{array}{l} 5+1 \\ 7-1 \end{array}$

Double 6.

$\begin{array}{r} 6 \\ + 6 \end{array}$

6 _____ 8

$\begin{array}{r} 6 \\ \cdots \\ + 8 \\ \hline 14 \end{array}$ ⟶ 7 fits in the middle.
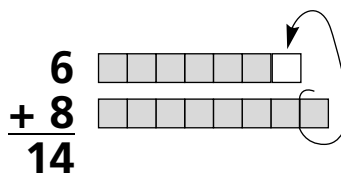
$\begin{array}{r} \mathbf{6} \\ + \mathbf{8} \\ \hline \mathbf{14} \end{array}$ $\begin{array}{l} 6+1 \\ 8-1 \end{array}$

Double 7.

$\begin{array}{r} 7 \\ + 7 \end{array}$

7 _____ 9

$\begin{array}{r} 7 \\ \cdots \\ + 9 \\ \hline 16 \end{array}$ ⟶ 8 fits in the middle.
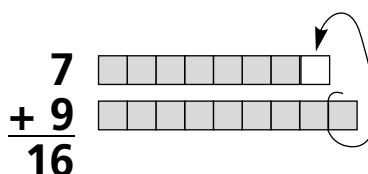
$\begin{array}{r} \mathbf{7} \\ + \mathbf{9} \\ \hline \mathbf{16} \end{array}$ $\begin{array}{l} 7+1 \\ 9-1 \end{array}$

Double 8.

$\begin{array}{r} 8 \\ + 8 \end{array}$

↑ (This is also Magic 9.)

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction

Name _____

Look. These are the same.

8 . . . . **+ 6** 7+7 **14** ↙	9 . . . . **+ 7** 8+8 **16** ↙	7 . . . . **+ 5** 6+6 **12** ↙

Practice **Number in the Middle**.

6 + 8	7 + 5	3 + 5	5 + 7	7 + 9	5 + 3	8 + 6
9 + 7	2 + 4	6 + 8	4 + 6	5 + 7	6 + 4	9 + 7
7 + 5	4 + 6	7 + 9	5 + 3	8 + 6	3 + 5	6 + 4

Practice **Number in the Middle** and **Count by 3s**.

5 + 7	8 + 6	9 − 3	7 + 5	6 + 3	5 + 3	9 − 6
9 + 7	4 + 2	3 + 6	6 + 8	5 + 7	9 − 3	6 + 4
3 + 6	8 + 6	7 + 9	4 + 6	6 + 3	3 + 5	9 − 6

Name _____

TRICK Family Pair

Learn
$$
\begin{array}{r} 7 \\ +\,2 \\ \hline 9 \end{array}
\qquad
\begin{array}{r} 2 \\ +\,7 \\ \hline 9 \end{array}
$$
Think of nose shapes.

7 2 9

$$
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 9 \\ +\,9 \\ \hline \end{array}
$$

$$
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 9 \\ +\,9 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
$$

$$
\begin{array}{r} 9 \\ +\,9 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
$$

Practice **Family Pair** and **Doubles**.

$$
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 3 \\ +\,3 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 8 \\ +\,8 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 12 \\ -\,6 \\ \hline \end{array}
\quad
\begin{array}{r} 4 \\ -\,2 \\ \hline \end{array}
$$

$$
\begin{array}{r} 18 \\ -\,9 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 6 \\ +\,6 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 6 \\ -\,3 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
$$

$$
\begin{array}{r} 5 \\ +\,5 \\ \hline \end{array}
\quad
\begin{array}{r} 14 \\ -\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 4 \\ +\,4 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 16 \\ -\,8 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
$$

$$
\begin{array}{r} 8 \\ -\,4 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 10 \\ -\,5 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,2 \\ \hline \end{array}
\quad
\begin{array}{r} 9 \\ +\,9 \\ \hline \end{array}
\quad
\begin{array}{r} 2 \\ +\,7 \\ \hline \end{array}
\quad
\begin{array}{r} 7 \\ +\,7 \\ \hline \end{array}
$$

Two Plus Two Is Not Five, Easy Methods To Learn Addition and Subtraction

Math Facts Listed by Trick Name

Backwards 1
2-1, 3-1, 4-1, 5-1, 6-1, 7-1, 8-1, 9-1, 10-1

Big Subtraction
18-9, 17-8, 17-9, 16-7, 16-9, 15-6, 15-9, 14-5, 14-9, 13-4, 13-9, 12-3, 12-9, 11-2, 11-9

Big Subtraction Shortcut
10-4, 10-6 · 12-5, 12-7 · 14-6, 14-8

Count by 3s
3+6, 6+3 · 9-3, 9-6

Curvy Numbers
3+5, 5+3 · 8+5, 5+8
8-3, 8-5 · 13-5, 13-8

Double +1
2+3, 3+2 · 3+4, 4+3 · 4+5, 5+4
5+6, 6+5 · 6+7, 7+6 · 7+8, 8+7
8+9, 9+8

Doubles
1+1, 2+2, 3+3, 4+4, 5+5, 6+6, 7+7, 8+8, 9+9 · 2-1, 4-2, 6-3, 8-4, 10-5, 12-6, 14-7, 16-8, 18-9

Family Pair
2+7, 7+2 · 2+5, 5+2 · 3+8, 8+3

Family Partners
5-2, 5-3 · 7-3, 7-4 · 9-4, 9-5
9-2, 9-7 · 7-2, 7-5 · 11-5, 11-6
13-6, 13-7 · 15-7, 15-8 · 11-3, 11-8

Looks Like Number in the Middle
4-2 · 5-3 · 6-4 · 7-5 · 8-6
9-7 · 10-8

Lots of 4s
4+8, 8+4 · 12-4, 12-8

Magic 9
9+2, 2+9 · 9+3, 3+9 · 9+4, 4+9
9+5, 5+9 · 9+6, 6+9 · 9+7, 7+9
9+8, 8+9 · 9+9

Number in the Middle
1+3, 3+1 · 2+4, 4+2 · 3+5, 5+3
4+6, 6+4 · 5+7, 7+5 · 6+8, 8+6
7+9, 9+7

Number +1
1+1 · 2+1, 1+2 · 3+1, 1+3
1+4, 4+1 · 1+5, 5+1 · 1+6, 6+1
1+7, 7+1 · 1+8, 8+1 · 1+9, 9+1

Right Next to Each Other
2-1, 3-2, 4-3, 5-4, 6-5, 7-6, 8-7, 9-8, 10-9

Straight Lines
4+7, 7+4 · 11- 4, 11-7

Stretch
3+7, 7+3 · 10-3, 10-7

2 Ladder
2+2 · 2+4, 4+2 · 2+6, 6+2 · 2+8, 8+2
4-2, 6-2, 8-2, 10-2 · 6-4, 8-6, 10-8

Zero
1+0, 2+0, 3+0, 4+0, 5+0, 6+0, 7+0, 8+0, 9+0, 0+1, 0+2, 0+3, 0+4, 0+5, 0+6, 0+7, 0+8, 0+9 · 9-9, 8-8, 7-7, 6-6, 5-5, 4-4, 3-3, 2-2, 1-1 · 9-0, 8-0, 7-0, 6-0, 5-0, 4-0, 3-0, 2-0, 1-0