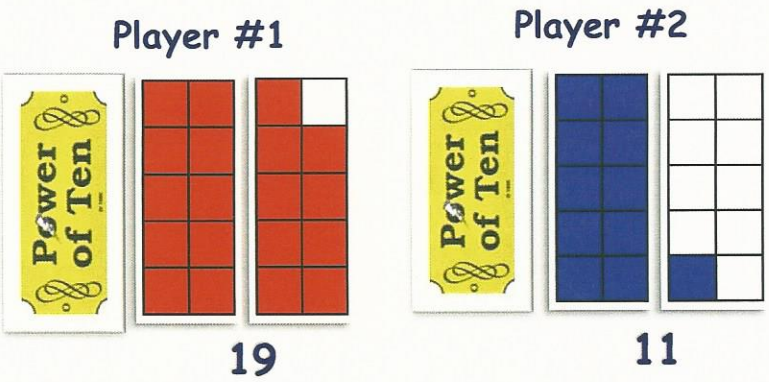
Power of Ten FACE OFF

When students are thoroughly familiar with the number shapes shown on the cards, they are ready for the Power of Ten game.

Power of Ten is played as follows:



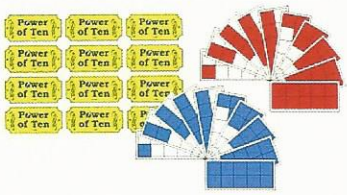
1. Each player places a ten-card face up on the floor or table before him. He then draws another card that he places face up alongside his ten-card. The player then states the value of the two cards *(values range from 11 to 20)*. The player with the highest total takes the two non-ten (or the units-digit) cards and retains them. In the event of a tie, each player turns over another card and the player with the highest total takes the cards for the current round and the previous round.

2. Each player's ten-card remains in place as he turns over another card to place alongside it. Again the person with the greatest total removes the two units-cards.

3. The game continues until all cards have been exhausted.
   Note: The **Power of Ten** game teaches place-value concepts and addition with **ten**. This game establishes a solid understanding of early addition.

4. Also play **Power of Nine**, **Power of Five** and **Power of Eight**. When the students have mastered the **Power of Ten**, **Nine**, **Five**, and **Eight** games, vary the activity by having each student turn over the top two cards from his deck while stating the total of both. This game is known as '**Face Off Challenge**'. The person with the greatest total wins and may thus remove both cards played. The game continues in this way until all cards are exhausted.

5. As students gain proficiency with each of these games, they will have learned how to add **10**, **9**, **5** and **8** to any given number. Students will now feel confident when tackling addition of all single-digit numbers, as addition of numbers less than **10, 9**, **5** and **8** will appear infinitely easier!

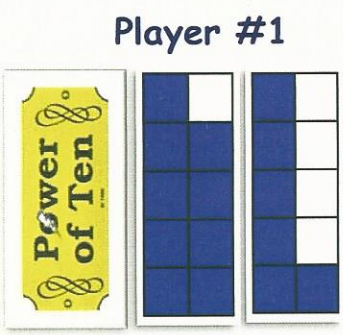


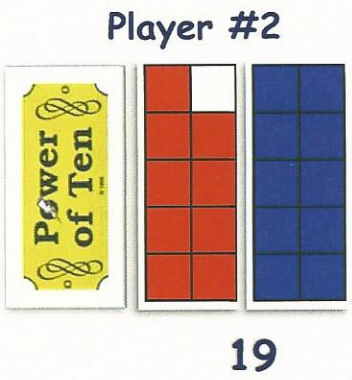
Power of Nine FACE OFF

When students are thoroughly familiar with the number shapes shown on the cards, they are ready for the Power of Nine game.

Power of Nine is played as follows:

1. Each player places a nine-card face up on the floor or table before him. He then draws another card that he places face up alongside his nine-card. The player then states the value of the two cards *(values range from 10 to 19)*. The player with the highest total takes the two non-nine (or the units-digit) cards and retains them.





   In the event of a tie, each player turns over another card and places it on top of the previous card turned over. The player with the highest total for this round takes the cards for the current round and for the previous round.

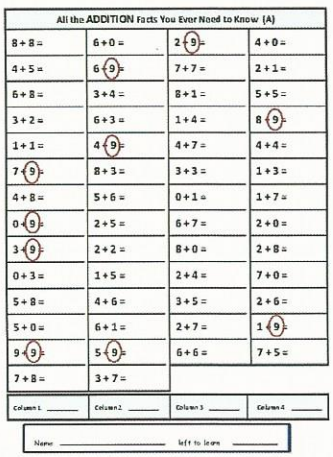
2. Each player's nine-card remains in place as he turns over another card to place alongside it. Again the person with the greatest total removes the two units-cards.

3. When a student is playing **Power of Nine**, encourage him to look at the two cards and try to see how many squares are colored. Then try to figure out what the brain did – find a student who can put this into words. "It usually moves one from the smaller number to make a ten." Sometimes one student gets the first part of the sentence and then another student will get the underlined part. These two students' names can be added to the **'Rule Makers'** or **'Pattern Makers'** list.

4. The game continues until all cards have been exhausted.
   Note: The **Power of Nine** game teaches place-value concepts and addition with **nine**. This game establishes a solid understanding of early addition.

Connections to All the Facts

Give the **All the Facts** sheets meaning by connecting to stories.

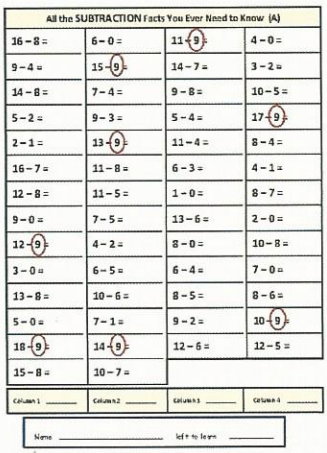


All the ADDITION Facts You Ever Need to Know (A)

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

Column 1 _____ Column 2 _____ Column 3 _____ Column 4 _____

Name _____ left to learn _____



All the SUBTRACTION Facts You Ever Need to Know (A)

16−8=	6−0=	11−9=	4−0=
9−4=	15−9=	14−7=	3−2=
14−8=	7−4=	9−8=	10−5=
5−2=	9−3=	5−4=	17−9=
2−1=	13−9=	11−4=	8−4=
16−7=	11−8=	6−3=	4−1=
12−8=	11−5=	1−0=	8−7=
9−0=	7−5=	13−6=	2−0=
12−9=	4−2=	8−0=	10−8=
3−0=	6−5=	6−4=	7−0=
13−8=	10−6=	8−5=	8−6=
5−0=	7−1=	9−2=	10−9=
18−9=	14−9=	12−6=	12−5=
15−8=	10−7=		

Column 1 _____ Column 2 _____ Column 3 _____ Column 4 _____

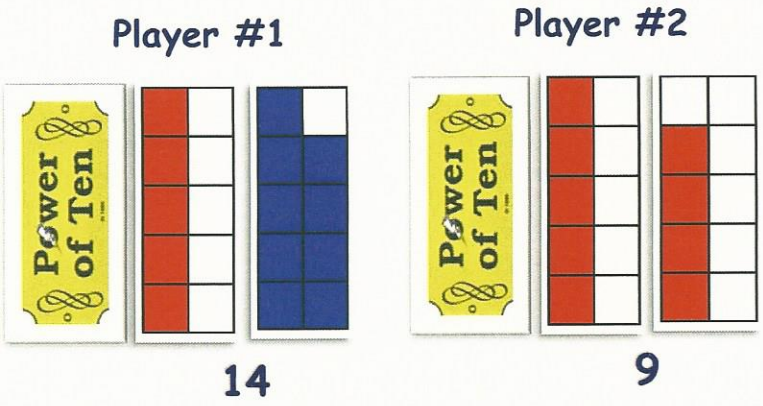
Name _____ left to learn _____

Power of Five FACE OFF

When students are thoroughly familiar with the number shapes shown on the cards, they are ready for the Power of Five game.

Power of Five is played as follows:

1. Each player places a five-card face up on the floor or table before him. He then draws another card that he places face up alongside his five-card. The player then states the value of the two cards *(values range from 6 to 15)*. The player with the highest total takes the two non-five (or the units-digit) cards and retains them. In the event of a tie, each player turns over another card and the player with the highest total takes the cards for the current round and the previous round.



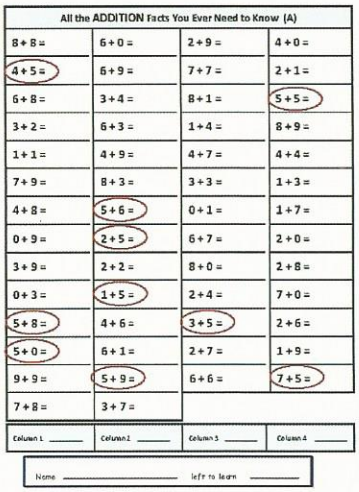
2. Each player's five-card remains in place as he turns over another card to place alongside it. Again the person with the greatest total removes the two units-cards.

3. The game continues until all cards have been exhausted.
   Note: The **Power of Five** game teaches place-value concepts and addition with **five**. This game establishes a solid understanding of early addition.

4. Also play **Power of Ten**, **Power of Nine** and **Power of Eight**. When the students have mastered the **Power of Ten**, **Nine**, **Five**, and **Eight** games, vary the activity by having each student turn over the top two cards from his deck while stating the total of both. This game is known as '**Face Off Challenge**'. The person with the greatest total wins and may thus remove both cards played. The game continues in this way until all cards are exhausted.

Connections to All the Facts

Give the **All the Facts** sheets meaning by connecting to stories.

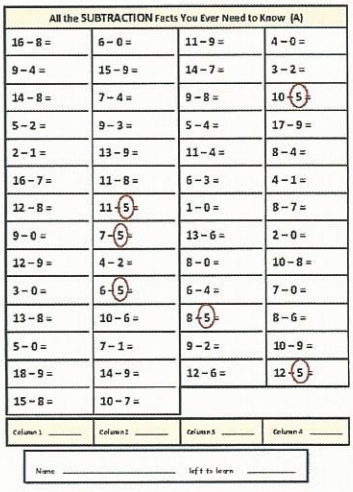


All the ADDITION Facts You Ever Need to Know (A)

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

Column 1 ____ Column 2 ____ Column 3 ____ Column 4 ____

Name ____ left to learn ____



All the SUBTRACTION Facts You Ever Need to Know (A)

16−8=	6−0=	11−9=	4−0=
9−4=	15−9=	14−7=	3−2=
14−8=	7−4=	9−8=	10−5=
5−2=	9−3=	5−4=	17−9=
2−1=	13−9=	11−4=	8−4=
16−7=	11−8=	6−3=	4−1=
12−8=	11−5=	1−0=	8−7=
9−0=	7−5=	13−6=	2−0=
12−9=	4−2=	8−0=	10−8=
3−0=	6−5=	6−4=	7−0=
13−8=	10−6=	8−5=	8−6=
5−0=	7−1=	9−2=	10−9=
18−9=	14−9=	12−6=	12−5=
15−8=	10−7=		

Column 1 ____ Column 2 ____ Column 3 ____ Column 4 ____

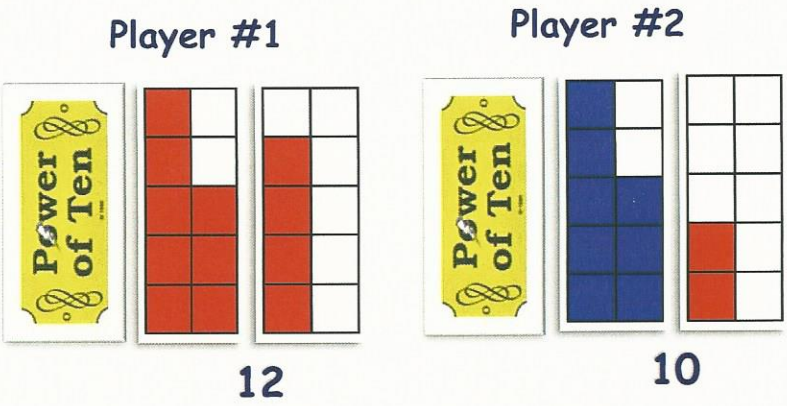
Name ____ left to learn ____

Power of Eight FACE OFF

When students are thoroughly familiar with the number shapes shown on the cards, they are ready for the Power of Eight game.

Power of Eight is played as follows:

1. Each player places an eight-card face up on the floor or table before him. He then draws another card that he places face up alongside his eight-card. The player then states the value of the two cards *(values range from 9 to 18)*. The player with the highest total takes the two non-eight (or the units-digit) cards and retains them. In the event of a tie, each player turns over another card and the player with the highest total takes the cards for the current round and the previous round.



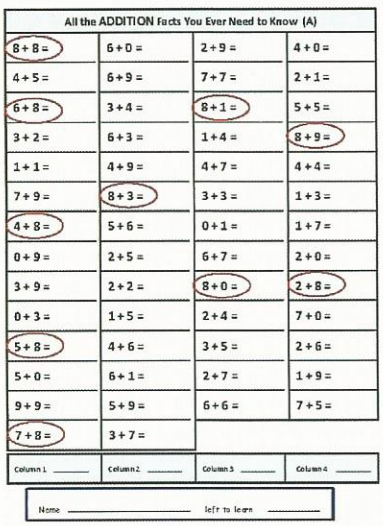
2. Each player's eight-card remains in place as he turns over another card to place alongside it. Again the person with the greatest total removes the two units-cards.

3. The game continues until all cards have been exhausted.
   Note: The **Power of Eight** game teaches place-value concepts and addition with **eight**. This game establishes a solid understanding of early addition.

4. Also play **Power of Ten**, **Power of Nine** and **Power of Five**. When the students have mastered the **Power of Ten**, **Nine**, **Five**, and **Eight** games, vary the activity by having each student turn over the top two cards from his deck while stating the total of both. This game is known as '**Face Off Challenge**'. The person with the greatest total wins and may thus remove both cards played. The game continues in this way until all cards are exhausted.

Connections to All the Facts

Give the **All the Facts** sheets meaning by connecting to stories.

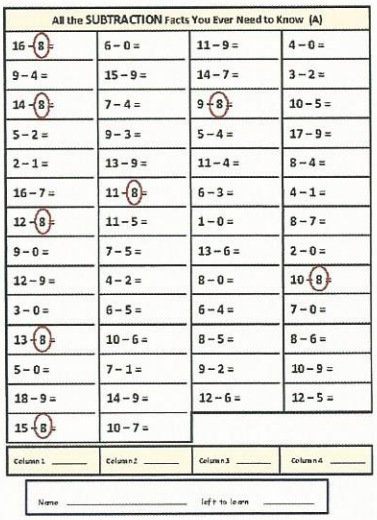


All the ADDITION Facts You Ever Need to Know (A)

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

Column 1 _____ Column 2 _____ Column 3 _____ Column 4 _____

Name _____ left to learn _____



All the SUBTRACTION Facts You Ever Need to Know (A)

16-8=	6-0=	11-9=	4-0=
9-4=	15-9=	14-7=	3-2=
14-8=	7-4=	9-8=	10-5=
5-2=	9-3=	5-4=	17-9=
2-1=	13-9=	11-4=	8-4=
16-7=	11-8=	6-3=	4-1=
12-8=	11-5=	1-0=	8-7=
9-0=	7-5=	13-6=	2-0=
12-9=	4-2=	8-0=	10-8=
3-0=	6-5=	6-4=	7-0=
13-8=	10-6=	8-5=	8-6=
5-0=	7-1=	9-2=	10-9=
18-9=	14-9=	12-6=	12-5=
15-8=	10-7=		

Column 1 _____ Column 2 _____ Column 3 _____ Column 4 _____

Name _____ left to learn _____