



MATH ACTIVITIES

Notes:

These activities are intended to reinforce some math skills (not all) covered throughout the year in a fun way with support of a parent - or the whole family. Discussions are as important as the game itself. Please make sure that your child is provided with time to express his understanding of the concepts, with guidance when needed.

You may find that playing the same game more than once will be beneficial. Please adapt the activities, making them easier or more challenging to meet your child's needs. You can also create your own rules if the rules are not clear.

Keep in mind that fun, success and learning are the goals. And remember to visit the Links section of our website for more ideas. Thank you for your support!

Material needed for most activities: counters (or objects, macaronis, etc.), coins (loonies, dimes and pennies), one or two decks of cards, and dice. To replace a 0 to 9 die, draw a card (0 to 9).

Mental Math (Addition): If I want to add 47 to 54, first I think $40 + 50$ (the tens) = 90 then $7 + 4$ (the ones) = 11, finally I add 90 and 11, thinking $90 + 10 + 1$.

 <p><u>Before the game</u></p> <p>You may want to talk about the concepts that will be practiced:</p> <ul style="list-style-type: none"> • What do you know about this? • Can you give me an example? • Etc. 	 <p><u>During the game</u></p> <p>As you are playing, you can ask questions:</p> <ul style="list-style-type: none"> • What do you think about your answer? • Can you tell me more about that? • Do you agree with me? Why or why not? • Have we solved a similar problem? • How did you reach that conclusion? • Can you get the same answer but use a different method? • What would happen if...? • Can you predict the next one? • Does that always work? 	 <p><u>After the game</u></p> <p>Review the concepts and ask:</p> <ul style="list-style-type: none"> • What did you think of the activity? • Do you think we should play again? Why? • What have you learned? • What do you still need to practice?
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D - Greatest Wins	<u>Skill:</u> Place value - Identifying numbers
	<u>Note:</u> This activity is great for working on expanded notation.
<u>Variations:</u> Draw 3 (or 4) cards.	
<u>How to play:</u> Draw two cards (1 to 9 and faces as 0) or roll 2 ten-sided dice. Form a number (first card for tens, second for ones) and say it... in French! Example (4 cards): Player one: $7000 + 800 + 00 + 2 = 7802$ / Player two: $6000 + 800 + 80 + 7 = 6887$ Two Way Play - Choose Greatest or Least as the Winner	
From: http://www.boxcarsandoneeyedjacks.com/ (Activity of the month)	

E - Addition Top-it	<u>Skill:</u> Addition facts - Addition - Mental Math *
<u>Variations:</u> Each player turns over 3 cards and finds the sum. Advanced Version: Players turn over 4 cards, form two 2-digit numbers, and find the sum. Players should consider how they form their numbers since different arrangements have different sums. For example, a player turns over 2, 5, 7, and 4. $74 + 52$ has a greater sum than $25 + 47$.	
<u>How to play:</u> Materials: 1 deck of cards with 4 each of the numbers 1 through 10 Number of Players: Two (2) to Four (4) Object of the game: To collect the most cards. Directions: Shuffle the cards and place the deck number-side down on the playing surface. Each player turns over 2 cards and calls out the sum of the 2 numbers. The player with the largest sum wins the round and takes all the cards. In case of a tie for the largest sum, each tied player turns over 2 more cards and calls out the sum. The player with the highest sum wins the round and takes all the cards from both plays. Answers can be checked with an Addition Table or with a calculator. Play continues until there are too few cards left for each player to have another turn. The player who took the most cards wins. Or, players may toss a penny to determine whether the player with the most or the fewest cards wins.	
From: http://www.salineschools.com/everydaymath/topit4.doc	

F- Subtraction Top-it	<u>Skill:</u> Addition and subtraction facts - Mental Math *
<u>Variations:</u> Players turn over 4 cards, form two 2-digit numbers, and find the difference. Players should consider how they form their numbers. $75-24$ has a greater difference than $57-42$.	
Directions: Each player turns over 3 cards, finds the sum of any two of the numbers, then finds the difference between the sum and the third number. The player with the largest difference takes the cards. <u>Example:</u> A 4, 8, and 3 are turned over. There are 3 combinations that will result in a positive number. $4+8 = 12;$ $12-3 = 9$ $3+8 = 11;$ $11-4 = 7$ $3+4 = 7;$ $8-7 = 1$	
From: http://www.salineschools.com/everydaymath/topit4.doc	

G - 100s 10s 1s	<u>Skill:</u> Place value - Representing
	<u>Note:</u> Loonies, dimes and pennies are required for this activity.
<p>What to do: Show an amount of money 4 different ways. Example: \$6.42 could be 6 loonies, 4 dimes, 2 pennies and 5 loonies, 14 dimes, 2 pennies and 4 loonies, 23 dimes, 12 pennies.</p>	

H - Families	<u>Skill:</u> Addition and subtraction facts
	<u>Note:</u> This game helps connecting addition to subtraction.
<p>Variations: use face cards to make families up to 13 (or 14 with Jokers!).</p>	
<p>How to play: Use a deck of forty cards: four suits of ace through 10. The goal is to make families of three cards earning a point for each family. A family is three cards whose numbers are related by addition or subtraction.</p> <p style="text-align: center;">For example: 5, 5, and 10 are a family because $10 - 5 = 5$ or $5 + 5 = 10$; 7, 2, and 9 are a family because $7 + 2 = 9$, $9 - 2 = 7$, $9 - 7 = 2$, or $2 + 7 = 9$.</p> <p>Shuffle the deck, deal 5 cards to each player and place the remaining cards face down in a draw pile. The player to the dealer's left draws a card from the draw pile so that six cards are now in the player's hand. If using these six cards, the player can form two families, she lays them on the table, earns two points, and the round ends. If the player can form only 1 family, she places it on the table, earns one point and discards one card. If she is not able to form a family, she just discards one card. Play passes to the player on her left who attempts to form families and use all cards. When a player is able to use all her cards to form families, and has no cards left in her hand, she goes out ending the round. This player becomes the dealer for the next round. Games with three or four players end when a player has earned a total of five or more points. The high scorer wins.</p> <p style="text-align: center;">From: http://www.mathnstuff.com/games.htm</p>	

I-Multiplication Top-it	<u>Skill:</u> Multiplication facts
	<u>Variations:</u> Start with cards 1 to 4 and keeping adding cards as children gain confidence.
<p>How to play: The game is played the same way as Addition Top-It (Activity E), except that players find the product of the numbers instead of the sum. The player with the largest product wins the round and takes all the cards.</p> <p style="text-align: center;">From: http://www.salineschools.com/everydaymath/topit4.doc</p>	

J - Math War	<u>Skill:</u> Math facts
	<u>Note:</u> The game could be played to review +, - or X facts.
<u>Variations:</u> Start with cards 1 to 5 and keeping adding cards as children gain confidence.	
<u>How to play:</u>	
<ol style="list-style-type: none"> 1. Assign values to face cards J=11, Q=12, K=13 or remove them if desired. 2. Each pair of players deals cards as if playing war (whole deck evenly). Students do not look at cards. 3. Each player flips up two cards and adds (subtracts or multiplies) the two numbers. They announce to their partners the answer. 4. The player with the highest sum (etc.) wins the trick. If the players disagree on an answer, another person can be the referee. Play for a set time and the player with the most cards wins, or play until one player possesses all the cards. 	
From: http://www.lessonplanspage.com/MathWarCardGame2-5.htm	

K - Two-Dice Sums	<u>Skill:</u> Addition facts - (Probability)
<u>Variations:</u> Play a few times to discover which sums are more frequently rolled. You may want to redo Activity B, creating a bingo card that gives you better chance to win.	
<u>The object:</u> to remove all the counters in the fewest rolls possible.	
<u>How to play:</u> Two or more players can play. Each player needs 11 counters, a game strip that lists the numbers from 2 to 12 spaced far enough apart so the counters can fit on top of each number, and a recording sheet. Here are the rules for playing:	
<ol style="list-style-type: none"> 1. Each player arranges 11 counters on the game strip and records the arrangement. 2. Once the counters are arranged, players take turns rolling the dice. 3. For each roll, all players can remove one counter if it is on the sum rolled. Players keep track of the number of rolls of the dice it takes to clear their game board. 	
After players have had the chance to play the game for several days or so, have a discussion about the different ways they arranged the counters and the number of rolls it took. Have them write about the arrangements that are best for removing the counters in the fewest number of rolls.	
From: http://teacher.scholastic.com/lessonrepro/lessonplans/grmagam.htm	

L - Distance	<u>Skill:</u> Estimation - Measurement
<u>Note:</u> A ruler will be needed to measure the length of a card.	
<u>What to do:</u>	
Estimate the number of cards needed to go from one side to the other of the table. Verify. Try other objects.	
Estimate the length of the table in centimeters. Measure one card and decide if you want to change your estimation.	
Verify. Try with different measurements: length of a bed, width of a room, etc.	
Remember: a close estimation is a good estimation! Discuss strategies to use to improve estimations.	

M - Greatest Wins 2	<u>Skill:</u> Place value - Addition - Mental Math *
	<u>Note:</u> This activity is great for working on expanded notation.
How to play:	
Play Greatest Wins (see D) but this time, each player makes 2 numbers and adds them up. Players compare their sum to their opponent's. Greatest sum wins.	
From: http://www.boxcarsandoneeyedjacks.com/	

N - Greater Than	<u>Skill:</u> Addition facts to 18
	<u>Note:</u> You can change the game to review multiplication facts.
<u>Materials Needed:</u> playing cards for every 2 or 4 players, 1 dice for each group of players.	
<u>Description of the activity:</u>	
You will need a set of playing cards (take out the J,Q. and K's) for every two or four players. Players will shuffle the cards and put them in the middle of the group. Each player will roll a dice and the highest number starts the game. On the player's turn, he will pick two cards from the pile. The cards are then placed in front of him, and he will add and find the sum. After all 2 or 4 players have found the sum of their two cards, the student with the greatest sum, takes all the cards. The player with the greatest number of cards at the end of the game is the winner.	
<u>Extension:</u> You can use the J=10, Q=11, and K=12 for more advanced problems. The game can also be reversed to find the lowest number for the difference of the two cards, then the player with the fewest number of cards at the end of the game is the winner.	
From: http://www.lessonplanspage.com/MathGreaterThanCardGameIdea13.htm	

O - Division Top-it	<u>Skill:</u> Multiplication and division facts
<u>Variations:</u> Start with cards 1 to 3 and keeping adding cards as children gain confidence.	
What to do:	
Each player turns over 3 cards and uses them to generate division problems as follows:	
<ul style="list-style-type: none"> * Choose 2 cards to form the dividend. * Use the remaining card as the divisor. 	
Divide and drop the remainder. The player with the largest quotient wins the round and takes all the cards.	
<p style="text-align: center;"><u>Example:</u> you draw 2, 1 and 3. You can make 12 divided by 3.</p>	
If it is too difficult, just change the rules! Multiply first two cards and divide by the third.	
From: http://www.salineschools.com/everydaymath/topit4.doc	

P - Closest Number	<u>Skill:</u> Place value - Mental Math *
	<u>Note:</u> Use cards 0-9 for this activity. Start playing with 2 digit numbers, than 3, than 4.
<u>How to play:</u> Each player draws 4 red cards. For example, cards drawn were 6, 5, 7, 2. Each player then draws 4 black cards, builds and verbalizes the number. Let's say: 4000 + 200 + 60 + 3 Players now attempt to build a number with their red cards that is closest to that number (black cards). Player would build 5267 - That is the closest they can build to 4263. Players then compare. The player with the smallest difference takes all the other player's cards.	
From: http://www.boxcarsandoneeyedjacks.com/ (Activity of the Month)	

Q - How many?	<u>Skill:</u> Estimation to 1000
	<u>Note:</u> One estimation a day keeps the brain awake!
<u>What to do:</u> Estimate the number of Cheerios in a bowl. Think of something that can help you make a good guess (number of Cheerios in a spoon). Verify. Estimate the number of alleys in the groceries store, cars in the parking lot, cookies in a bag, words on a page, leaves on a plant, etc.	

R - Number Race 2	<u>Skill:</u> Multiplication facts - Graphs
	<u>Note:</u> Please discourage counting as children should use strategies taught in class and talk about them.
<u>What to do:</u> Play the Number Race (as in F) but this time, you will multiply the numbers rolled. You will have to prepare your own sheet to record your results. Which numbers will you choose?	

S - Patterns	<u>Skill:</u> Patterns
	<u>Note:</u> You can use objects instead of cards.
<u>What to do:</u> Create a pattern using cards (abbc). Example: □□□♥□□□♥□□□♥. Create another abbc pattern. Example: ♥□□□♥□□□♥□□□. Follow that pattern doing actions. Example: jump, snap, snap, clap, etc. Try with other types of patterns : abba, abbcc, etc.	

T - Five in order	<u>Skill:</u> Comparing - Place value
	<u>Note:</u> You may start by making 2 digit numbers.
<u>What to do:</u> Draw 3 cards (1 to 9 and 10 as 0) and build a 3 digit number. Repeat to make 5 numbers. Organize from lowest to highest.	

U-Multiplication Bingo	<u>Skill:</u> Multiplication facts - (Probability)
	<u>Note:</u> Talk about the results you had when playing Number Race 2 (R).
<p><u>What to do:</u> You will make you own bingo for a multiplication game where you can cover the product of 2 numbers rolled (if you roll 4 and 5, you can cover 20). First decide which numbers you will choose for your card. You need 25 numbers. Are they any numbers that you want twice? Any number you won't choose? When your bingo card is ready, play a few times. Decide if you want to change the numbers on your card.</p>	

V - The Game of Pig	<u>Skill:</u> Mental Math* (+) - (Probability)
<u>Variations:</u> Start with 1 die, stop at 50, play with 3 dice, stop at 200, etc.	
<p>The object: to be the first to score 100 points or more. How to play: Players take turns rolling two dice and following these rules: 1. On a turn, a player may roll the dice as many times as he or she wants, mentally keeping a running total of the sums that come up. When the player stops rolling, he or she records the total and adds it to the scores from previous rounds. 2. But, if a 1 comes up on one of the dice before the player decides to stop rolling, the player scores 0 for that round and it's the next player's turn. 3. Even worse, if a 1 comes up on both dice, not only does the turn end, but the player's entire accumulated total returns to 0. After players have had the chance to play the game for several days, have a discussion about the strategies they used. You may want to list their ideas and have them test different strategies against each other to try and determine the best way to play.</p>	
From: http://teacher.scholastic.com/lessonrepro/lessonplans/grmagam.htm	

W - Water	<u>Skill:</u> Estimation - (Volume)
	<u>Note:</u> You will need a measuring cup and different glasses.
<p><u>What to do:</u> Find a large measure cup. Note the 500ml line. Guess how many times you will need to fill a glass of water to get 500 ml. How do you know? Try. Can you guess how many ml of water you can put in your glass? Repeat with different glasses (smaller and larger).</p>	

X - 10 - 20 - 30

Skill: Mental Math* - Addition

Variations: See the game Thinking Ahead (same web site)

With a full deck of regular cards, each card is worth its face value, with Ace = 1 and J, Q, K = 10. The object of the game is to have as few cards as possible remaining in your stack after going through the entire deck once only. Shuffle the deck, then lay down cards one at a time face up, horizontally overlapping but so that each card's value can still be seen. Cards can be removed only in groups of three if the three cards add to a sum of 10 or 20 or 30.

Suppose the first three cards you lay down, left to right, are 4, 7, 9. With these cards, $4 + 7 + 9 = 20$, so these three cards are removed from the stack and placed in a discard pile.

Now lay out another three cards to begin again. Suppose you lay out 2, 5, 1. Since $2 + 5 + 1 = 8$ and is not equal to 10 or 20 or 30, then you lay another card face up on the right end of the stack. If the next card is an 8, then your stack is now (from left to right) 2, 5, 1, 8. Once the stack has more than three cards, you can examine what I'll call

Group A - the three leftmost cards (2, 5, 1)

Group B - the two leftmost cards and the one rightmost card (2, 5, 8)

Group C - the one leftmost card and the two rightmost cards (2, 1, 8)

Group D - the three rightmost cards (5, 1, 8)

Do any of these sets add to 10 or 20 or 30? Starting from the leftmost group, Group A is $2 + 5 + 1 = 8$, so no; Group B is $2 + 5 + 8 = 15$, so no; Group C is $2 + 1 + 8 = 11$, so no; and Group D is $5 + 1 + 8 = 14$, so no again. Lacking a sum of 10 or 20 or 30, you now deal another card on to the right end of your stack.

Suppose you now deal a 9 so that your stack becomes 2, 5, 1, 8, 9. Your possible sums are:

the leftmost Group A of $2 + 5 + 1 = 8$

Group B of $2 + 5 + 9 = 16$

Group C of $2 + 8 + 9 = 19$

the rightmost Group D of $1 + 8 + 9 = 18$

You still don't have any sum of 10 or 20 or 30, so you deal the next card on to the right end of the stack. Before dealing the next card, note that the "middle group" of $5 + 1 + 8$ is not an option - you can't take cards out of the middle of the stack. The three cards you take must be taken from either or both ends of the stack.

Suppose your next card is a 3. Now your stack is 2, 5, 1, 8, 9, 3. Do you see the group that adds to 10 or 20 or 30? The underlined group here yields a sum of $2 + 5 + 3 = 10$. But wait! There is another group, too: (8, 9, 3), which yields a sum of $8 + 9 + 3 = 20$. You can remove either group of three cards (but not both).

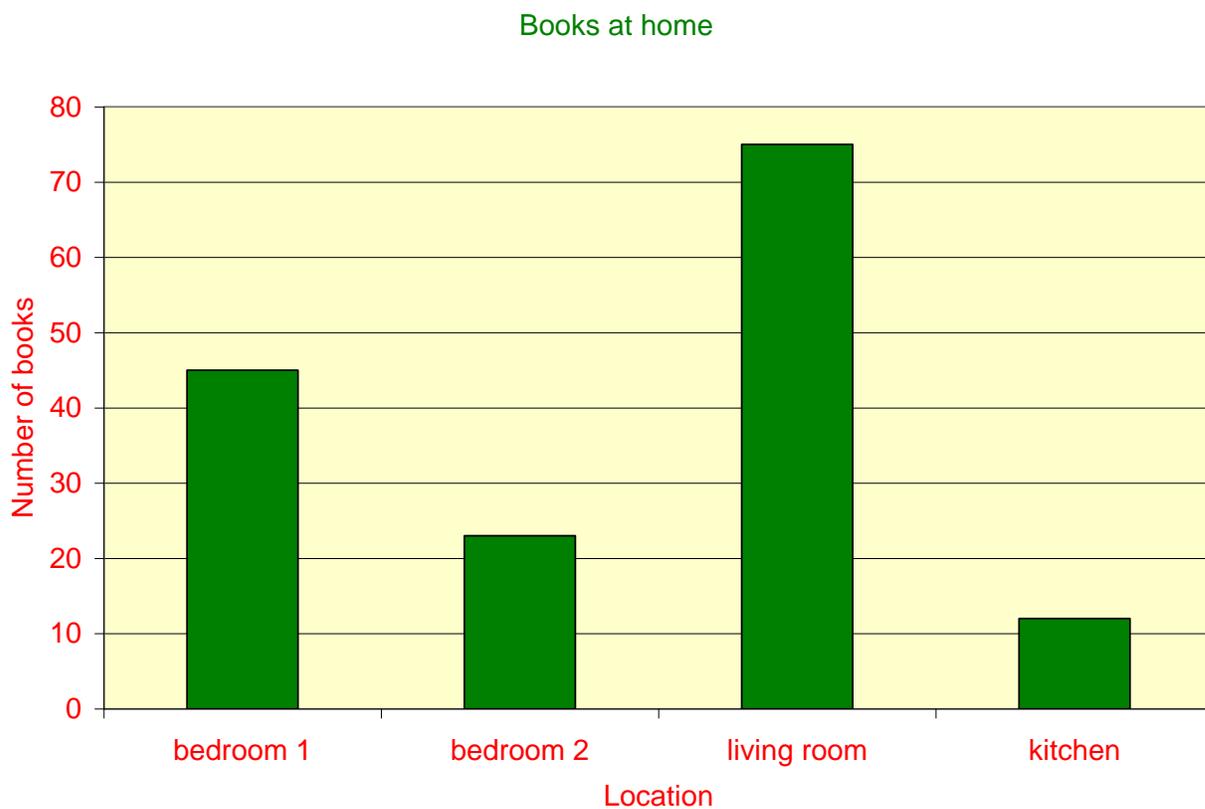
Let's say you remove the 8, 9, and 3. The remaining cards in your playing stack are now 2, 5, 1. This process is repeated, all the while looking for sums of 10 or 20 or 30, with the object of the game to have as few cards as possible left in your stack when you run out of cards to deal. The fewest possible cards to have left is one, since a complete deck of 52 cards with repeated removals of three cards will at best leave a remainder of one card. Sometimes, I may have twenty-one or more cards left in my stack - there simply weren't many combinations summing to 10, 20, or 30. I consider it a good game if I have seven or four cards left. Having only one card left in this game is comparable to a game of 300 in bowling - it's simply the best score possible, and it doesn't happen that often.

From: <http://www.home-school.com/Articles/phs25-bobhazen.html>

Y - Salute	<u>Skill:</u> Addition and subtraction
	<u>Note:</u> This game helps connecting addition to subtraction.
<u>Variations:</u> Start with cards 1 to 6, add another player, etc.	
Place players into groups of three players per group. Have two players sit facing each other, while the third player sits so they can see the other two players (like in a triangle shape). The two players who are facing each other are the guessers. They both choose one card from the deck (excluding the face cards) without looking at the card. Then the third player says "SALUTE" and the two guessers then put their card up to their ear/head so that their opponent can see. Making sure that they cannot. Now the two guessers can see each other's cards and the third student looks at both of the cards as well. The third player tells the two guessers what the sum of the two cards is. Since the players can see the other person's card but not their own, by knowing the sum - they can figure out what the other card is by using subtraction.	
From: http://www.lessonplanspage.com/MathArithmetic23Cards.htm	

AA - Making Change	<u>Skill:</u> Addition - Place value - Money
	<u>Note:</u> You will need coins for this activity.
<u>Variations:</u> You can also practice to give change (it costs 45¢ and I give you \$1 - it costs \$3.58 and I give \$10).	
<u>What to do:</u> Players use change to make as many combinations as possible to make change for a loony.	
From: http://www.wsd1.org/IsaacBrock/math_games.htm#makingchange	

BB - Perimeter	<u>Skill:</u> Estimation - Measurement
	<u>Note:</u> A ruler will be needed to measure the length of a card.
<u>What to do:</u> Estimate the number of cards needed to go around the table. Verify. Try other objects. Estimate the perimeter of the table in centimeters. Measure one card and decide if you want to change your estimation. Verify. Try with different measurement: perimeter of a carpet, book, poster, etc. Remember: a close estimation is a good estimation! Discuss strategies to use to improve estimations.	

Z - BooksSkill: GraphsNote: Graphs all have 6 elements!**What to do:**

Look at the graph. Make 5 observations. Remember to compare (There are ____ more books in bedroom 1 than in ____).

Create your own graph. Make 5 observations.

You could record number of CDs, age or height of people, length of feet, etc.

CC - Place Value Face Value	<u>Skill:</u> Place value
	<u>Note:</u> At home, we often use a Teddy Bear, a cow, even a remote control when we don't have enough human players!
<u>Variations:</u> You can play with 2 digit numbers, or 4, etc.	
<u>How to play:</u> Remove Jokers from deck, for lower level players, or to introduce the game, also remove the face cards (those are the ones with the faces on them) The dealer decided which number is the target number. Players take turns receiving a card from the dealer. If the target number is 100, players will quickly learn to not take more than 3 cards. Once everyone is happy with the number of cards they have, they change the order of the cards, to make the number closest to the target number. For example, if a player is aiming for 400, they may move the cards 9, 3, and 2, to be 3, 9,2. Thus reading the cards as 392 The player with the closest number to the target number wins, and becomes the dealer. All players must read their cards aloud, and estimate how close they are to the target number.	
From: http://www.wsd1.org/IsaacBrock/math_games.htm#placevaluefacevalue	

DD - 98	<u>Skill:</u> Mental Math *
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> See the website for ideas.	
<u>How to play:</u> This is a fairly simple game for 2 or more players, using a standard 52 card deck. Deal out four cards to each player and place the remainder face down to form the stock . The player to the dealer's left begins and play continues in clockwise order. Players play their cards on the table to form a face-up pile alongside the stock. At your turn you play one of your four cards to the face up pile, call out the new value of the pile, and then draw the top card from the face down stock to replace the card you played. At the start of the game there are no cards in the pile and its value is zero. Played cards affect the value of the pile as follows: <ul style="list-style-type: none"> ace to nine increase the value of the pile by the pip count of the card ten reduce the value by ten jack, queen the value stays the same king the value is set to 98 The aim is to avoid taking the value above 98. The first person who makes the value of the pile more than 98 loses, and has to take a drink. Example. The first player plays an 8 and says 8; the next player plays a 6 and says 14; the next player plays a king and says 98; the next player plays a jack and says 98; the next player plays a ten and says 88; the next player plays a 7 and says 95; the next player's four cards are 4, 5, 6, 9 - this player must lose.	
From: http://www.pagat.com/adders/98.html	

EE - Buzz	<u>Skill:</u> Multiples
	<u>Note:</u> This game could be played in a pool: no material needed!
<u>Variations:</u> Play Buzz Plus.	
<u>How to play:</u>	
<p>This game is used to review a specific fact family. The leader chooses a number between 2 and 9. The leader says 1, the next player says the 2, and so on. When they reach a multiple of the number chosen, the player says "buzz" instead of the number. If a player forgets to say buzz or says it at the wrong time, he or she is out. Play continues until they group reaches the last multiple of the number times 9.</p> <p>Buzz Plus</p> <p>This game is played just like buzz except the student must also say buzz when the chosen number is one of the digits. For example: If the chosen number is 3, they would say buzz at 3, 6, 9, 12, 13, 15, 18, 21, 23, 24, and 27).</p>	
From: http://www.multiplication.com/classroom_games.htm	

FF - Equations Game	<u>Skill:</u> Number
	<u>Note:</u> This game reviews all 4 operations.
<u>Variations:</u> Turn 2 cards to make a double-digit target number.	
<u>How to play:</u>	
<p>Each pair of players needs a deck of cards.</p> <p>Shuffle the cards and lay the first five face up in a row, then lay the rest of the deck at the end of the row and turn up the top card. This is the target card.</p> <p>The pair then manipulates the numbers of the first five cards into an equation that will equal the target card. They can use all the cards or just two, but no card can be used twice (unless two of the same number turned up).</p> <p>When a player comes up with an equation, they slap the target card and yell "Target!". They then have to proceed by explaining the equation to their partner.</p> <p>If the player is correct they can keep the cards that used in their equation. If the player is wrong, the other player can keep the cards used in the equation. The cards that aren't used are placed at the bottom of the deck and the game continues until all the cards are used.</p> <p>When the game is done, the players then add up all the values of their cards (Aces=1, Jacks=11, Queens=12, Kings=13). The player with the highest total wins.</p>	
From: http://www.canteach.ca/elementary/numbers9.html	

GG - Thirty-One	<u>Skill:</u> Addition - (Probability)
	<u>Note:</u> Seven players can play this game.
<u>Variations:</u> See the website.	
<u>How to play:</u>	
<p>Thirty-one uses a standard deck of 52 <u>playing cards</u>. Aces are high, counting 11; face cards count 10; and all other cards count face value. Each player gets three cards in his or her hand. The rest of the pack is set in the middle of the table to act as the stock for the game, and the top card of the stock is turned over to begin the discard.</p> <p>Starting with the player to the immediate left of the dealer and going clockwise around the table, each player takes turn taking the top card of either the stock or the discard and subsequently discarding a card. All players are trying to collect a hand value of 31 (or the closest to it) in the same suit. Play continues clockwise around the table until any player knocks or obtains a <i>blitz</i>.</p> <p>When it is one player's turn, and that player believes his or her hand is high enough to beat those of his or her opponents individually, he or she knocks on the table in lieu of drawing and discarding. All other players, going clockwise from the player who knocked, have one more turn to draw from the stock and discard, or they have the option of keeping all three cards in their hands, known as <i>standing</i>. The round ends when the player to the right of the player who knocked has had his or her final turn. If no one knocks by the time a player exhausts the stock, the round ends in a draw.</p> <p>At the end of the round, each player shows his or her hand and totals it up, only counting cards of the same suit. For instance, if the three cards in one's hand are all different suits, the highest value card would stand as that player's score. The player whose hand scored the lowest is declared the loser.</p> <p>If, at any time in the round, a player acquires a hand value of 31 the same suit, known as a <i>blitz</i>, he or she immediately shows it, the round immediately ends, and wins.</p>	
From: http://www.answers.com/main/ntquery?method=4&dsid=2222&dekey=Thirty-one+%28game%29&curtab=2222_1&linktext=Thirty-one%20(game)	

HH - 1 to 16	<u>Skill:</u> Number operations
	<u>Note:</u> This game reviews all 4 operations.
<u>Variations:</u> Turn 2 cards to make a double-digit target number.	
<u>How to play:</u>	
<p>Make a numbers chart with 1-16. You can have teams or students can play against each other. Each student has his own colored chips. Students take turns rolling three dice. They have to add, subtract, multiply, or divide the numbers they roll to match one of the numbers on the chart. For example if a student were to roll a 6, 3, and 4 the students could multiply the 6 and 3 to get 18 and then subtract the four to get 14. The student would then use their colored chips to mark the number they got. Once a number is taken it can not be marked again. Students play until all of the spaces are taken up and the student with the most chips on the board wins. If a student can't make a number to match the numbers left on the board then they have to pass to the next person. The game is over when all the numbers are taken.</p>	
From: http://www.theteacherscorner.net/lesson-plans/math/games/operations.htm	

II - Tic tac toe	<u>Skill:</u> Addition, subtraction
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> Use higher numbers, try multiplication, etc.	
<u>How to play:</u>	
<p>Each pair of players makes a standard tick-tack-toe grid. Instead of using X's and O's, students use the numbers 0 through 9. Use numbers 0 through 12 for a greater challenge. Each number can be used only once during a game.</p> <p>The object of the game is to complete any row, column, or diagonal so that two of the three numbers add up to the third. The order of the numbers does not matter. The first move may NOT be in the center. (If the first player is allowed to make that move, he or she can always win the game.) The second and subsequent moves, however, can be anywhere on the grid.</p>	
From: http://www.col-ed.org/cur/math/math50.txt	

JJ - Twenty-Five	<u>Skill:</u> Mental math (addition, subtraction)
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> Use higher numbers (draw 2 cards, make 2-digit numbers and try to get the sum 250).	
<u>How to play:</u>	
<p>Use playing cards numbered 1-9. Deal out all the cards, an equal number to each player. The cards are left facedown in a pile in front of each player. The person to the dealer's left goes first, and play continues clockwise.</p> <p>The first person turns over a card and places it face up in the center of the play area. The next person turns over a card, adds it to the card already played, says the sum out loud, and places the card on top of the previously played card. The next person turns over a card and adds the card to the sum of the first two cards. Play continues in this way until someone has a card that when added will give a sum greater than 25. When that happens, the player must subtract rather than add. Play continues until someone gets a sum of exactly 25. The player who gets a sum of exactly 25 wins that round and goes first in the next round.</p>	
From: http://www.education-world.com/a_tsl/archives/01-1/lesson0026.shtml	

KK - + and -	<u>Skill:</u> Mental math (addition, subtraction)
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> Use higher numbers (draw 2 cards, make 2-digit numbers and try to get the sum 250).	
<u>How to play:</u>	
<p>Deal out as many cards as possible from a deck of cards, so that each player has an equal number of cards. Put aside any extra cards. Explain that every black card in their pile represents a positive number. Every red card represents a negative number. In other words a black seven is worth +7 (seven), a red three is worth -3 (negative 3).</p> <p>Note: If this game is new to students, you might want to discard the face cards prior to dealing. If students are familiar with the game, or if you want to provide an extra challenge, leave the aces and face cards in the deck. In that case, explain to students that aces have a value of 1, jacks have a value of 11, queens have a value of 12, and kings have a value of 13.</p> <p>At the start of the game, have each player place his or her cards in a stack, face down. Then ask the player to the right of the dealer to turn up one card and say the number on the card. For example, if the player turns up a black eight, he or she says "8". Continue from one player to the next in a clockwise direction. The second player turns up a card, adds it to the first card, and says the sum of the two cards aloud. For example, if the card is a red 9, which has a value of -9, the player says "8 + (-9) = (-1)". The next player takes the top card from his or her pile, adds it to the first two cards, and says the sum. For example, if the card is a black 2, which has a value of +2, the player says "(-1) + 2 = 1."</p> <p>The game continues until someone shows a card that, when added to the stack, results in a sum of exactly 25.</p> <p>Extra Challenging Version</p> <p>To add another dimension to the game, you might have students always use subtraction. Doing that will reinforce the skill of subtracting negative integers. For example, if player #1 plays a red 5 (-5) and player #2 plays a black 8 (+8), the sum is -13: $(-5) - (+8) = -13$. If the next player plays a red 4, the sum is -9: $(-13) - (-4) = -9$. [Recall: Minus a minus number is equivalent to adding that number.]</p>	
From: http://www.education-world.com/a_tsl/archives/03-1/lesson001.shtml	

LL - Skip counting	<u>Skill:</u> Skip counting by 5s, 10s, and 25s (forward and backward)
	<u>Note:</u> Please adapt if necessary.
<u>What to do:</u>	
<p>Fill a cup with quarters. Take a spoonful. Estimate the amount of money in your spoon. Verify. To work with higher numbers, keep doing so until the cup is empty. Try with dimes or nickels.</p> <p>To count backward, start with the amount in total and subtract money from the spoon to find how much is left in the cup.</p> <p>No coins? Use Corn Pops (macaronis, dry beans, etc.) and pretend that each is worth a quarter!</p>	

MM – Place value game	Skills: Counting by 1s, 10s, 100s and Place value	Note: Please adapt if necessary.
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Material: A cup (that will be the bank) filled with 10¢ and 1¢, a plate, and a die.

What to do:

Level 1:

Goal of the game: To not go over 99¢.

Players take turns rolling the die and adding that number of dimes or pennies on the plate. When the plate holds \$1 or more, the last player who rolled the die loses. Players might have to make groups of 10 pennies on the plate in order to better see the amount of money.

For example, player 1 rolls a 6 and puts 6 dimes in the cup (total: 60¢). Player 2 rolls a 4 and puts 4 pennies in the cup (total: 64¢); if player 2 adds 4 dimes, there will be "\$1 or more" in the cup. Play continues.

Level 2:

Same game but this time, players note on paper what they put on the plate.

It may look like this: 10, 20, 30, 40, 50, 60 - 61, 62, 63, 64 - 74, 84, etc.

Level 3:

Goal of the game: To not go below 0¢.

Start with 9 dimes and 9 pennies on the plate. Players take turns rolling the dice and subtract. During the game, they might have to trade a dime for 10 pennies (with the bank) in order to be able to subtract pennies.

Level 4:

Same game, writing down what they are doing.

It may look like this: 99, 89, 79 - 69, 59 - 58, 57, 56, 55, 54, 53 - etc.

Level 5:

Goal of the game: To not go over 499¢.

Players will use loonies (for 100¢), dimes and pennies.

Level 6:

Same as level 5, with paper.

Levels 7 and 8: Start at 499 and subtract.

Adaptations

Work up to 999.

Instead of using coins, use bingo chips on a place value math (or just paper to record what is happening on the plate).

Hundreds	Tens	Ones

NN - 999	<u>Skill:</u> Mental math (addition, subtraction) - estimation - place value
	<u>Note:</u> Please adapt if necessary.
Variations: Start at 999 and subtract to get to 0. Use Ace to 9.	
<u>How to play:</u>	
<ul style="list-style-type: none"> • First decide how many cards you want to draw (1, 2 or 3). • Take that number of cards and make a number (use Ace as 1 to 9). • Add to previous sum. • Play continues until one player gets 999. <p>For example, player 1 decides to take 3 cards and gets 3, 6 and 4. He makes the number 643. Player 2 decides to also take 3 cards and gets 5, 5 and 6. He loses his turn because he has to make a 3-digit number and add it to 643; no matter what number he makes, the sum will be over 999. Player 3 decides to take 3 cards. He is luckier and gets 1, 3 and 1. He makes 311, adds it to 643 and announces the new sum: 954. Player 1 decides to draw only 2 cards, gets 2 and 6, makes 26 (62 would be too high) and announces 980. Player 2 may decide to draw only one card. Etc.</p>	

PP - Sum 20!	<u>Skill:</u> Mental math (addition, subtraction) - facts
	<u>Note:</u> Please adapt if necessary.
Variations: Change the sum, deal more cards, etc.	
<u>How to play:</u>	
<ul style="list-style-type: none"> • Each player draws 5 cards (Jokers as 0 to 9). • Use cards to make a sum of 20 if possible. With 3, 4, 5, 6, 8, you can do $3 + 4 + 5 + 8$. You can also do $34 - 6 - 8$. • Discard all 5 cards. Start with 5 new cards. • Player with more sums of 20 wins. 	

OO - Facts and Cards

Skill: Addition and subtraction facts - Solving equations

Note: inspired from <http://www.numero.org/rules.html>

Variations: Add J (as 11) to K (as 13) or play up to 15, to 18 using my [Facts cards!](#) You need 4 sets of cards. Use number only cards towards the end of the year (green cards).

Play subtracting: when you build, you're thinking of differences. Put a 5 on 9 if you have a 4 ($9-5=4$) or put a J on an 8 if you have a 3 ($11-8=3$).

Getting ready

Use A (= 1) to 10 cards. First, deal five cards to each player (ideally played with two players but can be played with more). Place two cards face up in the centre of the table.

Note: Although you start with two cards in the centre, the number of cards in the centre will vary during play. At times there will be less (sometimes no cards at all) and at other times, more than two. Place the remainder of the pack in the centre of the table (face down).

You are now ready to play, with the non-dealer, or player to the left of the dealer, having first turn.

Players take turns. Each player plays a Number Card from his/her hand, into the centre and must either take, build or discard.

Playing

A **take** is when a single card from your hand is matched to a card, or combination of cards, equalling the same number in the centre. The cards in the **take** and the matching card from the hand are then placed face down on the table near the player (this is your 'win stack' and these cards are counted at the end of the game to determine the winner). The hand is restored to five from the pack. It is important to always restore your hand to five cards at the completion of each turn.

It is not always possible to **take**. If you can not **take**, you try to **build**. A **build** is when a card from the hand is added to a single card, or combination of cards, from the centre. This creates a new number, ready for a later **take**. When you **build**, you must have the answer to that **build** in your hand in a single card.

If you cannot **take** or **build** you must **discard**. A **discard** is placed as a single card in the centre, not on top of other cards. Always restore your hand to five cards after every turn. This is the only way cards in the centre are replenished, to be used in later **takes** and **builds**. You may **discard** any card from your hand. However, where possible, **discard** a card you could use on your next turn.

When the pack is finished, keep playing until only one player has cards left. This player is then given a final chance to play, if able to **take**. The game is then over. Any cards left in the centre are added to the 'win stack' of the player who did the last **take** of the game. Any cards left in the final player's hands are subtracted from that person's 'win stack'. All players 'win stacks' are then counted and the player with the most cards is the winner.

From: <http://www.numero.org/rules.html>

QQ - Plus or Minus	<u>Skill:</u> Mental math (addition and subtraction of 2 digit numbers)
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> Change the sum, deal more cards, etc.	
<u>How to play:</u>	
<ul style="list-style-type: none"> • Each player draws 5 cards (Jokers as 0 to 9). • Each player selects any 4 four cards to create the greatest 2 double-digit numbers and record the sum. For example, I draw 8, 5, 2, 3, 7. I discard 2 and I add 85 + 73. I record 158. • Each player draws 3 cards and selects two to create the smallest 2-digit number possible. • Each player subtracts this number from the number recorded previously. For example, I draw 3, 7, 5. I discard 7 and subtract 35 from 158. I record 123. • Each player draws 3 cards and selects two to create the greatest 2-digit number possible. • Each player adds this number to the number recorded previously. For example, I draw 8, 7, 2. I discard 2 and add 87 to 123. I record 210. • The player with the highest sum wins. If at any point a player's score is less than 0, the other player wins. 	

RR - 4 Strikes...	<u>Skill:</u> Mental math (addition, subtraction)
	<u>Note:</u> Please adapt if necessary.
<u>Variations:</u> Allow 5 strikes, work with one 3-digit number and one 2-digit number, etc.	
<u>How to play:</u>	
<p>Player 1 writes an equation (addition or subtraction of two 2-digit numbers) and doesn't show it to the other player (eg. $35 + 10 = 45$).</p> <p>Player 1 then writes on another paper one of the following:</p> $\begin{array}{l} \underline{\quad} \underline{\quad} = \underline{\quad} \underline{\quad} + \underline{\quad} \underline{\quad} \qquad \text{or} \qquad \underline{\quad} \underline{\quad} + \underline{\quad} \underline{\quad} = \underline{\quad} \underline{\quad} \\ \text{or } \underline{\quad} \underline{\quad} = \underline{\quad} \underline{\quad} - \underline{\quad} \underline{\quad} \qquad \text{or} \qquad \underline{\quad} \underline{\quad} - \underline{\quad} \underline{\quad} = \underline{\quad} \underline{\quad} \end{array}$ <p>Player 2 has to figure out the number in each blank in the equation. If he guesses a number that is in the equation, player 1 writes it in all places it belongs. If he guesses a number that is not in the equation, he gets a strike. To win, he has to figure out all of the numbers before getting 4 strikes.</p> <p>This game offers opportunities to review addition and subtraction facts. Please take the time to discuss strategies as you play. For instance, looking at: $3 \underline{5} + \underline{\quad} \underline{X} = \underline{\quad} \underline{5}$, what would be a good guess for X? Can you explain your guess?</p> <p style="text-align: right;">(From Instructor, March/April 2009)</p>	

SS - 101 and OutSkill: Place value, mental mathNote: Please adapt if necessary.Variations: Use 1 to 9 cards, play 1001 and Out, allow 4 or 6 rolls, etc.

roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

How to play:

The goal is to arrive at a sum that is as close to 100 as possible without going over. The game involves luck and reasoning. Players draw their own game boards.

Rules: a die will be rolled six times by each player. With each roll, the player writes the number that comes up on his game board. He writes the first number on the first line of his board in either the 10s column or the 1s column; he writes the second number on the second line, etc. and can't change it. After writing six numbers, players fill any blanks with zeros, and then add to find the sum.

(From Instructor, March/April 2009)

SS - 101 and Out

Skill: Place value, mental math

Variations: Use 1 to 9 cards, play 1001 and Out, allow 4 or 8 rolls, etc.

How to play:

The goal is to arrive at a sum that is as close to 100 as possible without going over. The game involves luck and reasoning. Players draw their own game boards.

Rules: a die will be rolled six times by each player. With each roll, the player writes the number that comes up on his game board. He writes the first number on the first line of his board in either the 10s column or the 1s column; he writes the second number on the second line, etc. and can't change it. After writing six numbers, players fill any blanks with zeros, and then add to find the sum.

(préparé par René Ammann - From Instructor, March/April 2009)

Player 1 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 2 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 1 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 2 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 1 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 2 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 1 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 2 (101 and Out)		
roll	10s	1s
1		
2		
3		
4		
5		
6		
SUM		

Player 1 (1001 and Out)			
roll	100s	10s	1s
1			
2			
3			
4			
5			
6			
7			
8			
SUM			

Player 2 (1001 and Out)			
roll	100s	10s	1s
1			
2			
3			
4			
5			
6			
7			
8			
SUM			

Player 1 (1001 and Out)			
roll	100s	10s	1s
1			
2			
3			
4			
5			
6			
7			
8			
SUM			

Player 2 (1001 and Out)			
roll	100s	10s	1s
1			
2			
3			
4			
5			
6			
7			
8			
SUM			

**A**

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

**TT-En route !**

préparé par René Ammann

Choose a starting number for the biker.

Determine when players get points, e.g. when the new number is a multiple of 5, 50, etc.

Players take turn covering a number (and subtracting each time) to make a path that ends at the apple.

Talk about strategies used to subtract mentally or with paper.

B

4 7 6 1 8
 8 7 5 2
 6 3 9 4 9
 7 5 8 7
 3 6 2 9 2

**C**

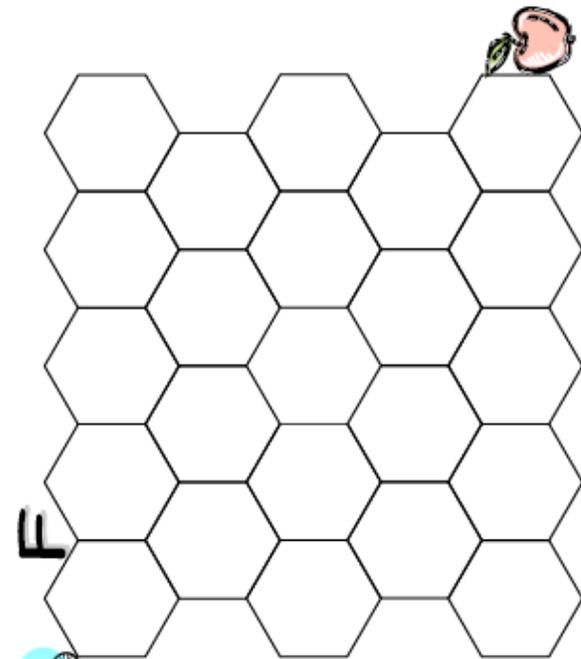
30 20 50 80 10
 70 90 30 60
 80 20 60 80 40
 30 90 30 70
 50 0 20 60 30

**D**

15 70 50 35 20
 60 95 45 55
 85 80 25 30 15
 15 70 50 75
 80 20 35 40 65

**Suggestions**

- A** Start with 60. Count a point when your answer is a multiple of 5.
- B** Start with 73. Count a point when your answer is a multiple of 5.
- C** Start with 700. Points for multiples of 50.
- D** Start with 925. Points for multiples of 50.
- E to H** Choose numbers and rules to meet your abilities.



TT-En route !

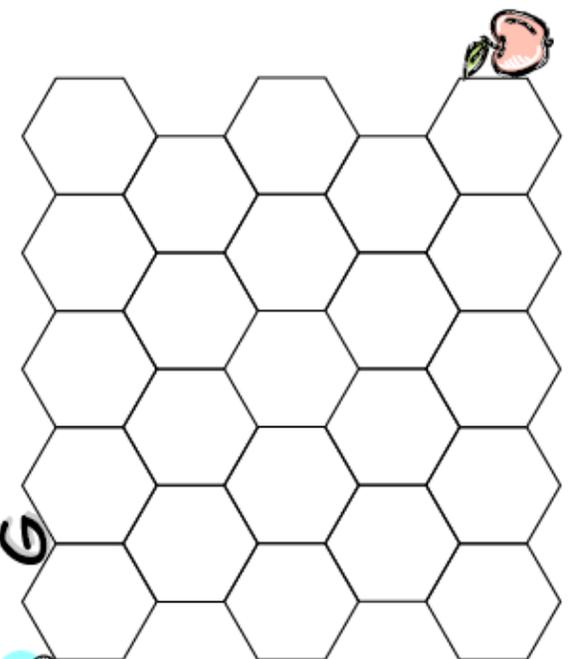
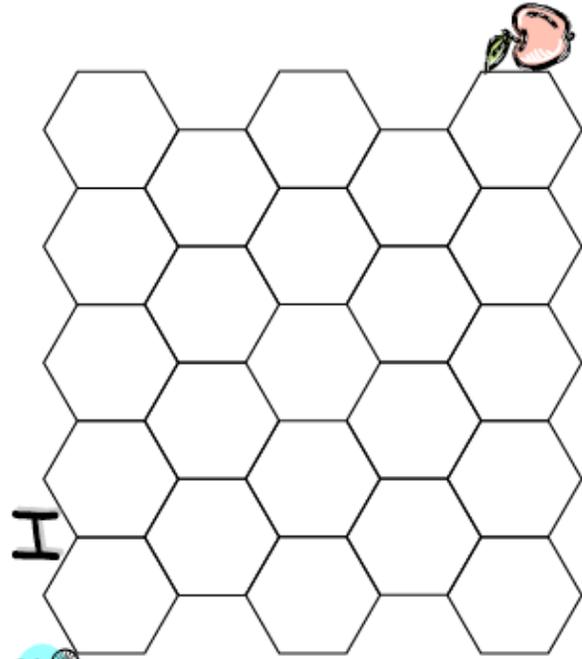
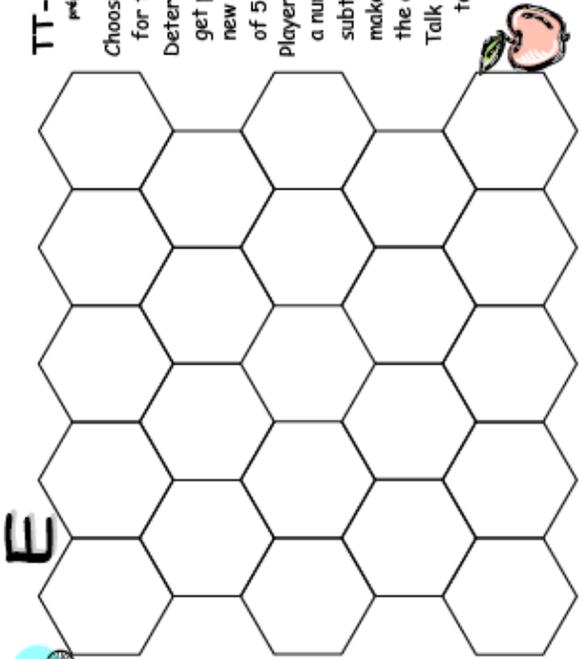
préparez par René Ammann

Choose a starting number for the biker.

Determine when players get points, e.g. when the new number is a multiple of 5, 50, etc.

Players take turn covering a number (and subtracting each time) to make a path that ends at the apple.

Talk about strategies used to subtract mentally or with paper.



UU - Tic-10-Tac-20-Toe

Skill: Facts and mental math (+ and -)

Note: Please adapt if necessary.

Variations: Remove lower numbers. Use a 4X4 grid. Use a 0-90 die (or multiply by 10 the numbers of the cards) and score points for sums of 100 or 200. Write the numbers on the opponent's paper.

Material: A (=1) to 9 cards and paper, pencil for each of the 2 to 4 players

How to play:

- Each player draws a Tic Tac Toe on his paper.
- First player turns a card and writes the number in any of the 9 squares of his Tic Tac Toe.
- Players then take turns turning a card, adding the number to the previous card and writing the difference between the sum and 10 on his paper. (Ex.: The first player turns 7 and writes 7 in his Tic Tac Toe. Second player turns 8. He adds 8 to 7 - the previous card - and announces 15. He then writes 5 on his paper because the difference between 10 and 15 is 5. If the third player turns 1, he will add 1 to the previous 8, announce 9 and write 1 because $10 - 9 = 1$).
- When all players had 9 turns, they find their score, counting 1 point for each line making a sum of 10 or 20. The player with the highest sum wins.
Ex.: The player with this Tic Tac Toe will count 5 points (4 sums of 20 and 1 sum of 10).

8	3	7
4	5	6
8	2	7

VV- Twenty-two In A Row

Skill: Facts and mental math (+ and -)

Note: Please adapt if necessary.

Variations: Use 2 sets of 0 to 9 cards (joker = 0) and try to make a line of 3 cards (sum: fifteen).

Material: all 5 to K red cards (J = 11, Q= 12, K = 13 and Joker = 14)

How to play: Find all red cards from 5 to K and the jokers. Put them face up.

Use 16 black cards to hold places and make a game board (4 lines of 4 cards, face down).

Players take turn to place a red card of their choice on the board. The winner is the first player to complete a row of 3 or 4 cards that add to 22. The row can be made up of cards placed by both players.

Adapted from <http://www.makingmathmorefun.com/magazine/Volume1.pdf>

WW-Batters up! adapted from <http://www.boxcarsandoneeyedjacks.com/>

Skill: Place value to 999, addition. **Equipment:** Cards (1 to 9) and 1 die.

Goal: Greatest sum after 5 rounds wins.

How to play (adaptations: 2 or 4-digit numbers, play 10 rounds, etc.)

- Each player draws 3 cards and builds a three-digit number.
- Each player reads in French their numbers to the other players.
- Each player rolls the die and notes the value according to the die.

For example, my number is 492. I roll 3 (the tens). My score (value) for that round is 90.

	player 1			player 2			player 3		
Round	Number	Roll	Value	Number	Roll	Value	Number	Roll	Value
1									
2									
3									
4									
5									
	_____ + _____ + _____ hund. tens ones			_____ + _____ + _____ hund. tens ones			_____ + _____ + _____ hund. tens ones		
	total score → _____			total score → _____			total score → _____		

	player 1			player 2			player 3		
Round	Number	Roll	Value	Number	Roll	Value	Number	Roll	Value
1									
2									
3									
4									
5									
	_____ + _____ + _____ hund. tens ones			_____ + _____ + _____ hund. tens ones			_____ + _____ + _____ hund. tens ones		
	total score → _____			total score → _____			total score → _____		

XX-Multiplication tic tac toe adapted from <http://www.boxcarsandoneeyedjacks.com/>

Skill: Multiplication (product to 25). Equipment: 2 dice (1 to 5, 6 is 0) and bingo chips.

Goal: Make a line of three bingo chips.

How to play: Player A rolls the dice, multiplies the numbers and verbalizes the product (for 3 and 2, say $3 \times 2 = 6$ and $2 \times 3 = 6$). He covers the two corresponding spaces on the game board. Player B does the same. Players continue to alternate turns.

Capturing an opponent's space: If a player rolls a number that is occupied by the opponent, that player removes the opponent's chip and replaces it with one of his own.

Rolling your own space: If a player rolls a number that is occupied by his own chip, he rolls again.

Adaptations: Set a time for the game, count points: 2 points for each chip in a line of three, four or five, 5 points for chips that are replacing an opponent's number, etc.; play the Addition tic tac toe.

	0 (when you roll 6)	1	2	3	4	5
0 (when you roll 6)	0	0	0	0	0	0
1	0	1	2	3	4	5
2	0	2	4	6	8	10
3	0	3	6	9	12	15
4	0	4	8	12	16	20
5	0	5	10	15	20	25

YY-Hundred board tic tac toe adapted from <http://www.boxcarsandoneeyedjacks.com/>

Skill: Place value. **Equipment:** cards 1 to 9 and 10 as 0, bingo chips (1 color per player).

Goal: Make a line of three bingo chips.

How to play: Player A draws 2 cards and verbalizes the 2-digit numbers (for 3 and 2, say 3 tens and 2 ones = 32 and 2 tens and 3 ones = 32). He covers the two corresponding spaces on the game board. Player B does the same. Players continue to alternate turns.

Capturing an opponent's space: If a player rolls a number that is occupied by the opponent, that player removes the opponent's chip and replaces it with one of his own.

Rolling your own space: If a player rolls a number that is occupied by his own chip, he rolls again.

Adaptations: Set a time for the game, count points: 2 points for each chip in a line of three, four or five, 5 points for chips that are replacing an opponent's number, etc.

0	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

Nom : _____

Due Friday

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

ZZ-Skip-counting by 10s

Mental math (add, subtract), skip count. **Material:** Cards (Ace = 1 to 9).

- ☑ **Step 1:** Players take turn drawing 2 cards, making a 2-digit number, adding 10 3 times.

Ex.: I draw 3 and 6. I say: 63, 73, 83, 93.

- ☑ **Write 3 sequences:**

_____, _____, _____, _____.

_____, _____, _____, _____.

_____, _____, _____, _____.

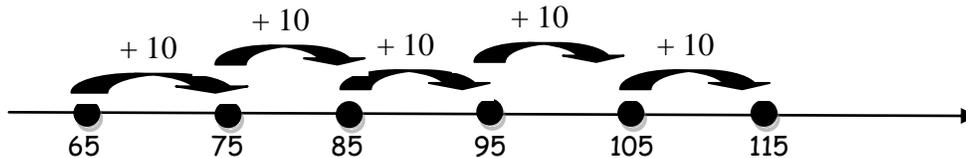
- ☑ **Step 3:** Same game but count backward and write 3 sequences.

Ex.: I draw 3 and 6. I say: 63, 53, 43, 33.

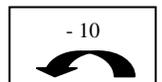
_____, _____, _____, _____, _____, _____, _____, _____.

- ☑ **Check:** Do I need more practice? Can I skip-count by 10s forward and backward without looking at the hundred chart? Go back to Step 1 or move to Step 5.
- ☑ **Step 5:** Draw 2 cards, make a 2-digit number, add 50.
- ☑ **Step 6:** Show additions on an empty number line. Indicate starting numbers and addition.

Ex.: I draw 6 and 5. I start at 65, add 10 5 times : 75, 85, 95, 105, 115.



- ☑ **Step 7:** Same idea, subtract 40 (you need to start with a number higher than 39).



- ☑ **Step 8:** Am I ready to bring my work to school? Should I practice a bit more?