MENTAL MATH GAMES FOR GRADE 1
Whenever we do an activity like mental math each and every day we need to bring variety to the work so that the children are inspired and are practicing many skills. Here is a fine collection of ideas that Waldorf students we have worked with have heartily enjoyed.

Number-object correspondence skills are a crucial prerequisite for calculation. These first two games help 1st grade children ‘get all the way into their fingers’ and into their mental counting zone. I recommend beginning with numbers 1-10.

FINGER MAGIC
1. Hold your hands behind your back then flash a number of fingers, beginning slowly at first, and then hide your hands again.
2. Call on a volunteer to give the number.
3. Show the students all kinds of tricks that our hands can do, examples: how our hands really love the numbers 5 and 10, how 2 fingers on each hand added make 4, how your hand can make certain numbers (like 3, 4, 5, 6, etc.) two different ways, how others (9, 10) can be made only one way.
4. Once they know single numbers, flash one number. Then flash another and have them add up from the first number.

HEADS DOWN, HEADS UP
1. Call out “Heads down”. All students hide their eyes under their arms with heads down.
2. Tap a glockenspiel a certain number between 1-9 for units.
3. Call out “Heads up”. Students raise their heads and hands to answer. Use rhythms for even numbers, stressing the 2x for 4, 6, 8, for example.
4. Add another instrument for 10-90. When you strike the wooden sticks together, for example, they count by 10’s. Make the numbers more difficult once they understand how you will begin with the 10’s place and then move to the unit’s place.
5. In second grade, add a third instrument for 100’s!
Variation: Have a volunteer strike or ring the instrument.

I’M THINKING OF A NUMBER
1. Write a number between 1-20 or ?, depending on grade level on a piece of paper. Start simple first no matter what the grade level so that they get a feel for the game.
2. Tell the class, “I’m thinking of a number between 1-20. Give them one clue to think on like “When I add 2 to it I get 5” or a more difficult clue, “It is an even number”.

1
3. Call on a volunteer. If with a difficult clue, the guess is incorrect, say, “That is an even number (if it is!) but it’s not my number” and then give another, easier clue.

Next step of the game:
1. Tell them, “Now you will ask me questions such as: is it even, is it greater than 10 or divisible by 5? See if you can find my number. I can only answer “yes” or “no” to your questions.”
2. Take turns going around the room and let each student ask one question; at first, you can write the information gained from each question on the board like >10 (greater than 10), even number.
3. Point out questions that eliminated lots of possibilities for them to learn how to hone their skills at this game.
4. After a few games, the students will find the answer very quickly.

**BIRDS GAME**
1. For subtraction practice, say or sing this rhyme, “__ little birds on a branch one day, Then with the wind some flew away. __ little birds on the branch did stay. How many birds flew away?”
2. At first use your fingers to show the birds. Encourage the students to do the same.
3. Call on a volunteer to give the answer.
4. When they know the game well you can ask for volunteers to give the number of birds at the beginning.

**PUPPIES GAME**
1. For addition practice say or sing this rhyme, “__ little puppies ran to eat, __ little puppies joined the treat, Bow wow, bow wow, How many puppies are there now?”
2. Follow 2-4 of Birds game.

**COUNTING BACK**
Count from 30 back to 15 for example. Count by 5’s to 100, count by 2’s to 48. This is great to do during transitions as well!

**KNOW YOUR NUMBERS**
1. Write numbers on BB such as 16, 28, 42, etc. based on their skill level.
2. Ask each child in turn to tell you the name of the number.
ODD OR EVEN?
1. Hold up a number card or write number on BB.
2. Ask ‘odd or even’ and children in turn tell.

BODY GESTURE MENTAL MATH
*Play this game once you have introduced the symbols for the four processes.*
1. Show the children how you will make each symbol with your body; addition with a jump into arms outstretched, subtraction with a jump with 2 arms outstretched together to one side, multiplication with arms and feet outstretched like an X, division with a jump one arm outstretched and the other making the two dots on either side, and equal sign with a jump and 2 arms outstretched a foot apart to one side.
2. Then clap hands to designate a number, then show sign, then clap another number.
3. Ask students to raise hands to clap answer.

MULTIPLE JUMPING
*Play this game after you introduce a times table. I used the image of Tamara Times and her 12 children who played a jumping game in the Ratio River. They jumped from stone to stone in the river counting by a times table; they loved those tables that much!*
1. Write products of a times table on felt squares or laminated paper (I rounded the edges to make them look like river rocks).
2. Place randomly on floor or turn some over (from a flood of water rushing down the river) and have each student find the order jumping from one “rock” to the other, saying the products as they go.

FINDING FRIENDS
1. Have the students make a stack of flashcards that have at least 2 different ways to get the same answer (ie. 8 divided by 2 and 10-6).
2. Pass out one card to each student.
3. Explain that they have one minute (or ?) to find their “answer buddy” without speaking. Once they’ve found each other they sit down next to each other.

I’M THINKING OF A NUMBER
1. Write a number between 1-12 or higher if the students are ready, on a piece of paper. Start simple first no matter so that they get a feel for the game.
2. Tell the class, “I’m thinking of a number between 1-12. Give them one clue to think on like “When I add 2 to it I get 10” or a more difficult clue, “It is an even number”.

3. Call on a volunteer. If with a difficult clue, the guess is incorrect, say, “That is an even number (if it is!) but it’s not my number” and then give another, easier clue.

Next step of the game:
4. Tell them, “Now you will ask me questions such as: is it even, is it greater than 10 or divisible by 2? See if you can find my number. I can only answer “yes” or “no” to your questions.”
5. Take turns going around the room and let each student ask one question; at first, you can write the information gained from each question on the board like >10 (greater than 10), even number.
6. Point out questions that eliminated lots of possibilities for them to learn how to hone their skills at this game.
5. After a few games, the students will find the answer very quickly.

I’M THINKING OF A NUMBER WITH A NUMBER LINE
Figure out the mystery number and learn about the number line at the same time.
1. You choose a mystery number. Decide which which two numbers you want to choose for the mystery number to be between. Draw the number line with only those two numbers at either end.
2. Play the game and add the numbers given with each guess.
3. You can use the greater and lesser than signs above the line to help as well.

GRID MATH
1. Make a grid on the BB like this, inserting different numbers based on what your students are capable of:

<table>
<thead>
<tr>
<th>+</th>
<th>3</th>
<th>7</th>
<th>2</th>
<th>÷</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>12</td>
<td>=</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>x</td>
</tr>
</tbody>
</table>

2. Point to the boxes one at a time and have the students calculate in their heads as you point. You can move from the sum to a missing part or from the sentence to the sum.