

“All the Facts about Fact Fluency”

Resources



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Top Ten Apps for Fact Fluency

1. Sum Fun – Use a puzzle to work on math skills (Free)
2. Mathly – Keep your skills sharp using math games with normal and hard levels (Free)
3. Sushi Monster – Practice and reinforce math fact fluency using an engaging game (Free)
4. Meerkat Math – Fun, interactive game to make learning facts fun (\$1.99)
5. 10 Monkeys Multiplication – Earn points and have fun with some silly monkeys while learning your multiplication facts (\$2.99)
6. Door 24 – Solve a mystery and work on various math skills (Free)
7. Times Table '14 – Work on specific facts at a time and watch the table shade in what you have mastered (Free)
8. Math Fight – Challenge a friend to a multiplication duel (Free or \$1.99)
9. Math Doodles – Practice adding multiple numbers in various formats with different levels and speeds...great for all ability levels (\$2.99)
10. Math Fact Master – Flashcard mode or challenge mode, either gives you great fact practice (\$0.99)

*Prices subject to change

Top Ten Websites for Fact Fluency

1. The Numbers Machine – also an app on Google Play
2. Xtramath – www.xtramath.org
3. Sumdog – free, but can buy version with more data
www.sumdog.com
4. Math Magician - <http://oswego.org/ocsd-web/games/mathmagician/mathsmulti.html>
5. Arcademics – many game options
<http://www.arcademicskillbuilders.com/games/>
6. Miss Maggie Around the World -
http://www.missmaggie.org/scholastic/roundtheworld_eng_launcher.html
7. Learning Games for Kids -
[http://www.learninggamesforkids.com/math multiplication games.html](http://www.learninggamesforkids.com/math_multiplication_games.html)
8. Greg Tang Math – www.gregtangmath.com
9. Math Man Division -
[http://www.sheppardsoftware.com/mathgames/mathman/mathman division.htm](http://www.sheppardsoftware.com/mathgames/mathman/mathman_division.htm)
10. Multiplication.com - <http://www.multiplication.com/games>

Top Ten Dice and Card Games for Fact Fluency

1. War – Divide the deck in half. Decide whether you will be adding, subtracting, or multiplying. Flip two cards over. Whoever has the greatest sum, difference, or product wins all of the cards.
*Enrichment – Use three or four cards for addition or multiplication
2. Race to 200 – Students play in pairs, threes, or fours (otherwise it is just too many in a group). Dealer gives each student 2 cards. Students multiply their cards and record the product. The first student to a sum of products of 200 wins.
3. Concentration – Have students create a set of cards (or teacher create) with facts on one card and answer on another. Students will place the cards face down in an array. A match is when they find a complete equation. Can be played alone or with a partner. Easily modified for enrichment or intervention depending on problems given.
4. Pile Up - This game provides an excellent demonstration of how multiplication works. First, players roll two dice to find numbers for their multiplication fact. Then, they place cards in piles to create a visual representation of each fact. When solving their problem, players can count the cards or use the multiplication facts they already know. It helps to use the phrase “groups of” when stating the multiplication fact for this game.
5. Tower High - Use Lego, pennies, wooden blocks, or any basic building material you can find. Have players roll a pair of dice and add the two numbers. The player gets that number in building materials if the dice are added correctly and uses them to build a tower. Go through 10 or 15 rounds. The player with the tallest tower wins.

6. Yahtzee – This game is affordable (approximately \$10) and can be easily mimicked in the classroom with the purchase of the scorecards (approximately \$4).
7. Capture the Card – Each pair of students needs a deck of flash cards. One player is the attacker and one player is the defender. The students should divide the cards equally between them. Play starts with the defender showing the attacker a problem from the defender’s deck. If the attacker gets the problem correct, they keep the card and keep “attacking”. If they get the problem incorrect, the students switch roles. The player to capture all of the cards wins.
8. Triangle Tower – Print off this PDF game board
<http://www.mathwire.com/games/triangletower.pdf>
Students will fill in the board with 10 of the possible products. They will roll two dice and cross out the product if it is on their board. The first player to cross off all 10 products wins. (Can be adjusted if players have access to dice other than six-sided)
9. Call Out - Roll three dice. Add the two smallest numbers and multiply the sum by the largest number. First person to state the answer wins.
10. Race Around the Track – Download or create a blank game board (with approximately 10-15 blank spaces). Give students a copy of the game board (one per student). Students should play in pairs or threes. Students will roll the dice (six sided or ten sided). In each game space they must write the fact they rolled and the entire fact family (multiplication/division or addition/subtraction). The first student to make it all the way around their board, with the correct answers, wins.

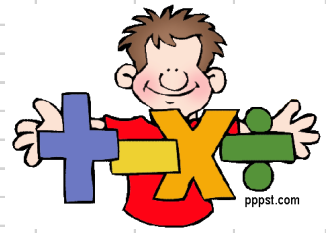
x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Set A	X 1
Set B	X 10
Set C	X 5
Set D	X 9
Set E	X 2
Set F	X 4
Set G	Squares
Set H	Leftovers

Most facts are practiced in multiple sets. However, the color coding shows you when that specific fact is in a fact fluency set for the first time.

- Chart from <https://sites.google.com/site/bestnextcommoncoremath/xtra-math>
- Good visual of when facts are introduced in families how many will be covered
- Resource has even more information on teaching and retaining facts (author Becky Berg)

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95												
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	Test #1	Test #2	Test #3	Test #4	Test #5	Test #6	Test #7	Test #8	Test #9	Test #10		
My Beginning Fluency Score: _____												
Goal for Test 5: _____												
Goal for Test 10: _____												
How will I reach my goal? _____												
Name: _____												



- Fluency documentation chart we use with students
- Students graph their own progress and set goals
- Keep in a manila folder with their tests so students (and parents) can see progress