



The Facts, Just Gimme The Facts!!!

Grade Level: 2-6

OVERVIEW: The teaching and learning of mathematics is facilitated by the development of a definite task analysis. Each skill builds upon and rests on the previous skills learned. Therefore, knowing all multiplication facts will help in the learning of subsequent skills in hard multiplication, division, fractions, etc.

PURPOSE: To help all students systematically learn their times tables, teach the facts in this way:

ACTIVITIES AND PROCEDURES:

1. Check to see that all students know their 0's, 1's, 2's, 5's, 10's, 11's--drill on these, have students all say them orally, show students how to count 5's on their fingers (hands-on)!!. After several days of practice, give a 2 or 3 minute timed test on these facts. Keep giving the test, each day, until all students or most students pass. Use a stop watch. As each child passes, you say their time. They write down the time and each day, they try to beat their old time, once they pass. If all students pass, celebrate with treats, an extra recess, popcorn, etc. Keep the papers of the students who pass, showing their best times.

2. Teach the 3 times tables. Students use hands to count out "0,3,6,9,12,15,18,21,24,27,30". Drill on these each day. Students say the 3's when they come in to class, when they go out from class, etc. **THEY ALL CAN DO THIS.**

3. Teach the 9 times tables. Make a set of HUGE hands, cut from bendable poster board. Number the fingers on the hands, from 1 to 10. Use these hands to show that, say 9×4 , can be visually seen by bending down the 4th finger and there you have 3 and 6 fingers. Practice and drill on this. All kids must do the finger bending with their own hands, too. In this way, they learn that they always have their 9 times tables with them!! Also, teach that, say, " 9×7 " starts with a "6", " 9×5 " starts with a "4", etc. Teach that the 2 digits of the answers equal 9--example, $36 = 3 + 6$, $45 = 4 + 5$, $81 = 8 + 1$, etc. **DRILL DAILY!!** Give a 3 and 9 times table timed test. Make it a 2 or 3 minute test. (as previously done). Students try to pass and then to beat their old score. Partner up kids who pass with those who need to pass. Each day have a "2-minute test your partner" time. Celebrate if/when all pass. Recognize those students with the top scores/fastest times with 100%, etc.

4. Teach the hardest fact of all: $7 \times 6 = 42$!!!!!! Make a big glittery sign for this. Do whatever is necessary to make kids aware of this fact.

5. Teach the facts that rhyme: $6 \times 6 = 36$... $6 \times 4 = 24$ $6 \times 8 = 48$ Sing them, rap them, say them, etc.

6. Teach these poems, which the kids love: 7×7 is 49, you are cool, you are fine!!!
 8×8 is 64, close your mouth and shut the door!!! (Some kids will make up their own poems!)

7. Teach "5,6,7,8"..... $5 \times 6 = 7 \times 8$

8. Once students learn the 0's,1's,2's,5's,10's,11's,3's,and 9's, the only facts left are:

$4 \times 4 = 16$	$6 \times 6 = 36$	$7 \times 7 = 49$
$4 \times 6 = 24$	$6 \times 7 = 42$	$7 \times 8 = 56$
$4 \times 7 = 28$	$6 \times 8 = 48$	$8 \times 8 = 64$
$4 \times 8 = 32$		

Students have only 10 facts to learn!!! 7 of these facts have raps, rhymes, etc. to facilitate learning. These 10 remaining facts go on flash cards. Each child has 2 sets of cards -- one for home and one for school. Run these last facts on construction paper. Kids put the answers LIGHTLY on the back of each card. Check the cards to make sure the correct answer has been written. Give each child an empty audio cassette plastic box or an elastic to hold the cards. Now PRACTICE, PRACTICE, PRACTICE!!!

9. The ultimate activity is the 5 minute timed test. This equals 80+ facts. When making this test, put the harder facts near the top and make the last 2 rows easy rows. This test is taken daily, with kids first passing the test (you check the tests and announce those who passed the next day), and then students try to beat their old scores (you read the old score, at the end of test time and if the child has passed that time, you collect their paper to be corrected). Certificates and treats go out to students who pass the test. Also, the top ten students with the fastest scores should be recognized. The class goal is for all students to pass this 5 minute timed test. This is a class goal, and when all students pass, YOU CELEBRATE!! AS THE PROFESSIONAL, YOU MAY DECIDE THAT EACH CHILD MUST PASS 100% OR 96% ETC.

TYING IT ALL TOGETHER: There is a great deal of success built into this task analysis for times tables. This entire process has been used successfully with 3rd graders and 5th graders. Students were able to learn hard multiplication, division and fractions because they knew the facts!!!

SUGGESTIONS/MODIFICATIONS

- The teacher may make times-tables charts and display them throughout the room.
- Flash cards may be shared or distributed as one set per group of students.
- The students may have a small party or extra playtime when the entire class learns their times-tables.