

EDIT presents...

# Factivation!<sup>®</sup>

## for Multiplication



The revolutionary way to teach Multiplication facts-  
now being used in classrooms across 28  
U.S. states, Canada, & Australia!

Presented by:  
Factivation LLC  
website: [www.factivation.com](http://www.factivation.com)  
e-mail: [info@factivation.com](mailto:info@factivation.com)

## Sharing & Reflection

1. What methods do you currently use or have you used in the past to promote mastery of Multiplication facts?
2. What motivators (if any) have you used to encourage study?
3. What percentage of your students do you feel are likely to study at home? \_\_\_\_\_
4. Please list any other challenges/obstacles you've experienced when it comes to Multiplication facts. (e.g. Are there certain facts that you've noticed students having a hard time memorizing? Has lack of fact fluency created a problem when teaching more difficult concepts? etc.)
4. What are you hoping to learn today?



Reflection 1:

In a 5th grade classroom (or beyond), describe what you feel is the psychological and/or academic impact on a student when Multiplication facts have not been mastered.



Reflection 2:

What parts of the Factivation!® method (see Factivation!® tenets) or lesson setup (see Simplifying the Times Table) differs from what you've done in the past? OR... What methods or elements of the lesson setup are similar to how you've addressed Multiplication facts in the past?

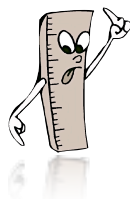


Reflection 3:

Will you apply what you've learned today to your teaching this school year? If so, what are 1-2 specific things that you plan to do to get the students in your classroom / school "factivated"?



- 1) Introduce only a few facts at a time.
- 2) Provide repetition through videos and daily chant recitations.
- 3) Vary the strategies used to familiarize students with facts.
- 4) Always connect the audio/visual to pencil/paper.
- 5) Begin high-interest fluency-building when students show success with strategy.
- 6) Ensure near-automaticity before moving on on to next fact group (lesson).
- 7) Only TEST what's been ADDRESSED!
- 8) Base pace off of lower learners.



Factivation!®



Don'ts

## **Don't rely on home-study!**

Sad, but true: not all parents will ensure home study is taking place, regardless of what is said during a phone call or conference. These parents (who may be *well-meaning*), as well as overcommitted kids, and numerous distractors at home are negatively impacting the amount of study that takes place after the school day.

## **Don't believe that you cannot afford to spend *some* time on the basic facts.**

For 4th and 5th especially, you can't afford NOT to!

## **Don't think that you have to devote *a lot* of time to getting students factivated!**

A multiplication fact center and daily chant recitations *add* little time to your day, but *subtract* a lot of teaching time!

## Crucial Components to Multiplication Success *using Factivation!® for Multiplication*

**Factivation 101:** Before beginning any Factivation!® Lesson, it is important for the teacher to have an understanding of how the program is set up. There are 9 lessons: Lessons 1-5 include six focus facts and Lessons 6-9 include three focus facts. There are four strategies used to introduce all facts: Rule, Trick, Chant, Connection and every lesson in the program is color-coded according to these strategies (Rule-yellow, Trick-purple, Chant-green, Connection-pink). **The Factivation!® Introductory Video gives students and teachers the needed background knowledge to begin the program. It is strongly recommended that this video is shown before beginning Factivation!®.**

**Fewer Facts:** The commutative property is emphasized throughout each lesson so, as an example,  $3 \times 6$  is introduced with  $6 \times 3$ , and uses the same strategy. This allows fewer facts to be “taught”.

**Strategies vs. Fluency:** Although strategies are used in the beginning stages of each lesson, the expectation is that students will use them as the needed background knowledge to quickly build fluency. Fast Facts videos and Fluency Builders accompany each lesson and should be used regularly.

**Concept of Multiplication:** Multiplication facts need not be taught in isolation, separate from instruction in the concept of Multiplication. Understanding the concept is crucial to students’ mathematical success, and this understanding is reinforced as facts are introduced through use of the Concept Builders within each lesson.

### Factivation!® Lesson Anatomy:

1. Use the chants as \_\_\_\_\_ throughout the day (regardless of the current lesson).
2. \_\_\_\_\_ current focus facts and “commutatives” with products showing.

3. Show Quick Flick (Or Full Video) \_\_\_\_\_  
to ensure understanding. \_\_\_\_\_ is key.
4. Use the \_\_\_\_\_.
5. Use the \_\_\_\_\_.
6. Show the three-minute \_\_\_\_\_ video.
7. Use the Progressive Assessments for both \_\_\_\_\_  
and \_\_\_\_\_.
8. Move on to the next lesson when students are \_\_\_\_\_.



## It's a "Fact"...

Multiplication mastery is attainable for every student in your class by **simplifying the times table** and **making Multiplication facts meaningful**.

Follow up with **high-interest fluency building** and **concept reinforcement** for a confident class of magnificent multipliers!

Getting Kids Factivated:  
**The Can-Do's, Should-Do's, and Must-Do's!**

Can-Do	Should-Do	It's a Must!
Use Practice Pages for each lesson	Keep old facts posted and labeled "Facts We Know" etc.	<b>Use chants as attention-getters- this could be the most powerful 20 seconds of your day!</b>
Make Flipbooks for each lesson	Post Factivation!® Strategy Posters	<b>Multiple viewings of Quick Flick video for each lesson (most are 5-10 minutes)</b>
Watch "Full" Videos - Quick Flicks are recommended for most viewings. Full Video could be used as intro. to new lesson.	* Color-code posters and flipbooks according to lesson strategy	<b>Post new lesson's facts and "commutatives" WITH products showing</b>
Bring fact practice to Art, PE, computer lab by having students make posters, powerpoints, etc. illustrating chants, tricks, connections etc.	Take advantage of the moments before lunch, recess, etc. by reciting chants, reviewing tricks, doing a 3-min. Fast Facts video, etc.	<b>Use Concept Builders - groups of objects, repeated addition, arrays, fact families / connection to division: all on ONE page!</b>
Teach chants to 1st and 2nd graders and ask their teachers to use them as their class attention-getters.	Allow students to teach a row on the progressive assessments.	<b>Use Fluency Builder Partner Activities- very quick, exciting, and self-motivating activities to build automaticity</b>
* Have students perform chants for younger students or in an assembly to get other classes excited about learning Multiplication facts.	As students are becoming familiar with new facts, allow partners to work on progressive assessments together and talk through strategies.	<b>Show Fast Facts Videos- three minute fluency building of facts from current and previous lessons, game-like and enjoyed by students</b>
* Create a "Full-Fledged Factuaries" bulletin board and add student names as mastery is achieved.	Save time & paper by using only half of the progressive assessment at a time.	<b>Use Progressive Assessments- a confidence building, versatile resource to provide practice and assess fact knowledge &amp; fluency</b>
* Plan a cupcake party. Motivate students with cupcake cutouts that they add a "sprinkle" (sticker) to with each passed lesson.	Set up a multiplication center with: 1) flipbooks for reference, 2) concept building activities, and 3) fluency building activities for the current and previous lessons' facts.	<b>Move on to next lesson only when students are ready. Those who know focus facts will continue to build automaticity.</b>





## Brain-Friendly Facts:

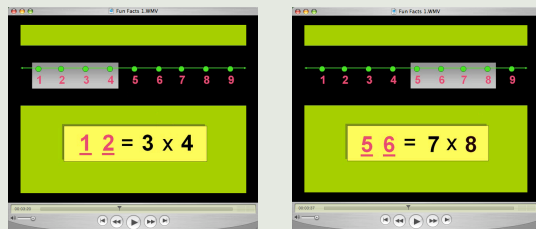
# Using Schema vs. Rote Memorization

“A schema is composed of organized personal background knowledge, and it acts as a filing system that has been set up to organize past experiences and interpret future experiences...Think of this background information as a hook on which to hang new information or a file folder into which new information can be integrated.” \*

Factivation!® utilizes existing schema **and** develops any needed background knowledge, thereby increasing fact retention and decreasing time spent memorizing:



**7X6=42:** Many students may know that beetles are insects and that insects have six legs. For students lacking that prior knowledge, background information is provided (see screenshots above) in the Lesson 6 videos. Another familiar schema used in the “7 Beetles” Chant is with patterns of sound. *Rhythm* and *rhyme* aid recall and allow students to remember this chant with little effort. Learning this simple rhyme provides the needed background knowledge into which the *introduced facts*, 7X6 and 6X7, are applied. Some students need only hear “7 beetles, 6 legs, walking to the zoo...” a few times to permanently store these factors (6 and 7) with the product of 42.



**3X4=12 and 7X8=56:** The schema used here is counting. Consecutively saying “1,2,3,4” comes naturally to *most* students, as does “5,6,7,8.” Presenting the multiplication facts 3X4 and 7X8 using this existing schema allows the learner to **apply meaning** to these facts, allowing for easier recall. Aiding memory, also (for all facts in the chant group) is the use of *rhythm*.

\* Quotes from *How to Teach Balanced Reading and Writing*, Bonnie Burns, 2006.

“When a student has a fully formed schema, just a few clues...will trigger it.” \*

\* Quotes from *How to Teach Balanced Reading and Writing*, Bonnie Burns, 2006.



After viewing the Lesson Six video, 7 and 6, when seen together, trigger the “7 Beetles” chant and students can quickly recall the product- 42. The reason that flashcards, electronic flashcards, and many internet games are not very effective is because seeing/hearing 7x6 ,6x7, etc. does not trigger anything in the students’ mind. A schema for that information was never established. For those methods to be effective, Multiplication facts need to be made meaningful first, which is exactly what Factivation!® does.



If the goal is to increase fact retention and quickly develop fluency, then **Multiplication facts need to be made meaningful.** Meaningful facts are not only easier to recall, but much more interesting to learn, resulting in students being excited about Multiplication and math, in general.

Lisa Litchenburg, 3rd Grade Teacher  
Creator, Factivation!® for Multiplication

## Connecting to Division Facts

Example:  $6 \overline{)42}$

$42 \div 6 = 7$



**42÷6 =7:** With the “7 Beetles” chant background knowledge now established, students confronting the division facts 42÷6 or 42÷7 can easily apply that new information to what is already known (that 6,7,and 42 belong together). **Students gain a complete understanding of the reciprocity of Multiplication and Division when taught to apply the Factivation!® strategies to BOTH operations.**

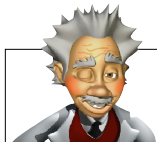


# Simplifying the Times Table

Lesson 1: Zeroes & Ones	Lesson 2: Twos	Lesson 3: Fives	Lesson 4: Nines	Lesson 5: Sixes
RULE Group	TRICK Group			

0X0=0	1X0=0	2X0=0	3X0=0	4X0=0	5X0=0	6X0=0	7X0=0	8X0=0	9X0=0
0X1=0	1X1=1	2X1=2	3X1=3	4X1=4	5X1=5	6X1=6	7X1=7	8X1=8	9X1=9
0X2=0	1X2=2	2X2=4	3X2=6	4X2=8	5X2=10	6X2=12	7X2=14	8X2=16	9X2=18
0X3=0	1X3=3	2X3=6	3X3=9	4X3=12	5X3=15	6X3=18	7X3=21	8X3=24	9X3=27
0X4=0	1X4=4	2X4=8	3X4=12	4X4=16	5X4=20	6X4=24	7X4=28	8X4=32	9X4=36
0X5=0	1X5=5	2X5=10	3X5=15	4X5=20	5X5=25	6X5=30	7X5=35	8X5=40	9X5=45
0X6=0	1X6=6	2X6=12	3X6=18	4X6=24	5X6=30	6X6=36	7X6=42	8X6=48	9X6=54
0X7=0	1X7=7	2X7=14	3X7=21	4X7=28	5X7=35	6X7=42	7X7=49	8X7=56	9X7=63
0X8=0	1X8=8	2X8=16	3X8=24	4X8=32	5X8=40	6X8=48	7X8=56	8X8=64	9X8=72
0X9=0	1X9=9	2X9=18	3X9=27	4X9=36	5X9=45	6X9=54	7X9=63	8X9=72	9X9=81

Lesson 6: Fun Facts 1	Lesson 7: Fun Facts 2	Lesson 8: Squares	Lesson 9: Final Facts
CHANT Group			CONNECTION Group



# “Factivating” Your Classroom

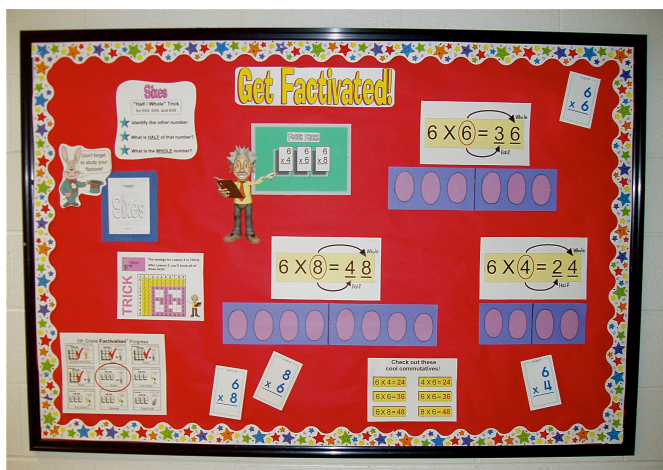
## Factivation Center

### Possible Components:

- ✗ Computer with Factivation!® DVD/ headphones
- ✗ Flipbooks
- ✗ Fluency Builders/ timer
- ✗ Practice Assessments
- ✗ Flashcards [Organized into strategy categories (Rule, Trick, Chant, Connection) or by lesson]
- ✗ Concept Mats
- ✗ Multiplication Match or other fluency-building games

### Center Suggestions:

- ▶ Model all activities before putting them in the center.
- ▶ Display an “I Can” list with center choices
- ▶ Have students work only with facts that have been covered (Do **not** have available flipbooks, flashcards, etc. that go along with later lessons.)



**Bulletin Board:** A Factivation!® bulletin board in the classroom, hallway, or cafeteria will serve as a visual reminder of the focus facts and strategy from the current or previous lessons. Use the “INFO” and “Posters” folders in each lesson for printables or create your own. The sample board shown was devoted entirely to the three facts (and commutatives) from Lesson 5.

# Visual Motivators



**Cupcakes and Sprinkles:** In Lesson 9, “Factuary AI” offers a congratulatory cupcake as students are bestowed with the title of “full-fledged factuary” for completing the Factivation!® program and learning all of their facts. Students love to earn a sprinkle on their cupcake cutouts to symbolize each lesson passed. Celebrate their final success with a cupcake party. Contact local bakeries (like SaraSara Cupcakes in OKC) for a possible donation of large, fancy, uniquely-flavored cupcakes that students will never forget! Generate even more excitement by having “Factuary AI” deliver the cupcakes. *Factuary AI costume: white lab coat, fake gray mustache, glasses, dark red shirt/tie, spiked gray hair, and “Factuary AI” badge/nametag.*

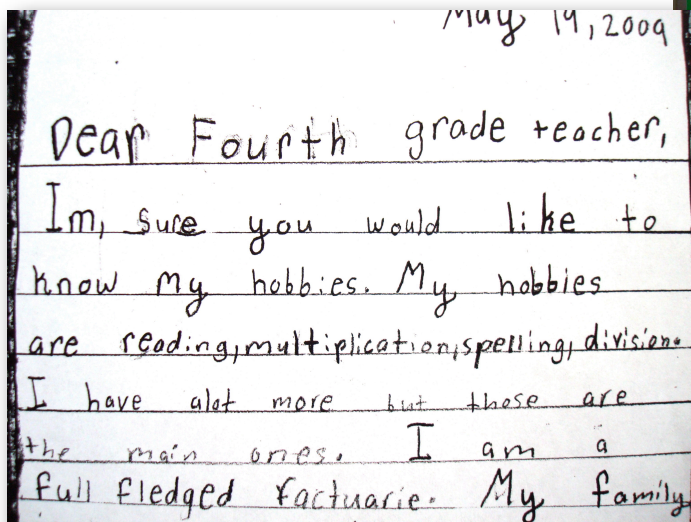


“Factuary AI” visits a 3rd Grade classroom to deliver cupcakes and certificates. Certificates located in Lesson 9 folder of Printables Disc.

**Factuary Bulletin Board:** Students love having their names added to a “Full-Fledged Factuaries” bulletin board. In this classroom, students’ names were added when the Factivation!® (timed) Post-Test was passed with 100% accuracy. This board was simple to create with black butcher paper and white chalk.



Students take pride in becoming a “full-fledged factuary” and are excited about working their way to earning that title. See the letter to next year’s teacher (left).



# Factivation!® for Multiplication

## Lesson Sample

\* All Lesson 6 sample items available on Factivation Training disc!

### Lesson 6 Videos



3 Video Lessons: Full Video, Quick Flick, Fast Facts

### Lesson 6 Printables



#### Lesson Info

[Page Divider.Lesson 6](#)  
[Overview.Lesson 6](#)  
[Fact Tracker.Lesson 6](#)



#### Practice Pages

[Practice 1.Lesson 6](#)  
[Practice 2.Lesson 6](#)  
[Practice 3.Lesson 6](#)  
[Practice 4.Lesson 6](#)



#### Flipbook

[Flipbook Front.Lesson 6](#)  
[Flipbook Inside.Lesson 6](#)



#### Concept Builders

[Concept Builder 1.7X6](#)  
[Concept Builder 2.3X4](#)  
[Concept Builder 3.7X8](#)



#### Fluency Builder

[Fluency Builder.Lesson 6](#)



#### Assessments

[Assessment A.Without Prompts](#)  
[Assessment B.With Prompts](#)



#### Posters

[Poster 1. 7 Beetles Chant](#)  
[Poster 2. 12345678 Chants](#)

# *Notes:*