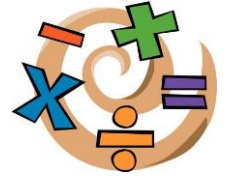# Tips and Tricks for Practicing
Multiplication Facts at Home

Currently in Flex Math Groups, students are working on the Multiplication and Division unit. Ideally, students should be practicing multiplication facts up to 12 x 12 at home on a regular basis. The ability to apply mental math strategies to recall these facts is key to their success! Below is a list of mental math strategies we will be using in class to learn multiplication facts:

Annexing zeros: When multiplying by numbers that end in 0, simply multiply by the first digit, then put the zero back.

- **Ex: 4 x 10** → Think 4 x 1 = 4, then insert the 0 for 40!
- **Ex: 3 x 200** → Think 3 x 2 = 6, then insert the 00 for 600!
- **Ex: 60 x 500** → Think 60 x 5 = 300, insert the 00 for 30 000

Doubling: When multiplying by 2, the product can be found by doubling the other factor. For multiplications by 4 double twice or double three times when multiplying by 8.

- **Ex: 2 x 8** → Think 8 + 8 = 16
- **Ex: 4 x 8** → Think 2 x 8 = 16 then **double** 16 to get 32
- **Ex: 8 x 8** → Think 4 x 8 = 32 then **double** 32 to get 64

Skip Counting: For multiplications by 5, count by fives until you get the number of groups needed!

- **Ex: 5 x 6** = Count: 5, 10, 15, 20, 25, 30!

Compensation: For any multiplication fact that is unknown, think of another multiplication fact that is close that you know. Then, add or remove groups as needed to find the product.

- **Ex: 6 x 8** → Think 5 x 8 = 40 then add one more group of 8 to get 48
- **Ex: 7 x 9** → Think 7 x 10 = 70 then remove one group of 7 to get 63
- **Ex: 12 x 8** → Think 10 x 8 = 80 then add two groups of 8 to get 96

Having trouble with these strategies? Try using manipulatives!

For some students, mental math strategies can be difficult to grasp because they do not have a strong understanding of operations. Using hands on materials to provide concrete demonstrations of these strategies can help scaffold these students. You can use simple materials such as bingo chips or tasty treats like Cheerios, Smarties or Skittles!

Activities to Practice Multiplication Facts

Practicing multiplication facts doesn't have to be a chore! There are lots of fun and practical ways to incorporate multiplication facts into your daily lives. Here are a few examples of how you can have fun practicing multiplication at home:

Multiplication Card Games: For these fun and competitive games, all you need is a deck of cards and some eager competitors!

- **WAR:** Split the deck of cards between two people. Both players simultaneously flip a card from their pile. The first player to multiply the cards and say the product wins the round!

- **Salute:** This game is played with three players. One player acts as 'referee' and holds the deck of cards. The referee hands the other two players a card, and they place it on their forehead without looking. The referee multiplies the cards and gives the product. The other players must then try to use their knowledge of multiplication facts to guess their card number. The first player to correctly guess their card wins the round and now acts as referee.

  - **Example:** The referee says the product is 56. Player 1 sees that Player 2 has an 8 card on their forehead. Therefore, they think: 8 x ___ = 56? Player 1 determines their card must be a 7!

Multiplication Math Sites and Apps: For children who love playing on the computer or iPad, there are many fun and educational sites available. Here are a few examples:

- **http://www.coolmath-games.com/**
- **http://www.multiplication.com**
- **http://www.math-play.com/multiplication-games.html**

Use Real-World Opportunities: For students to value their learning, it is important for them to see and understand how the skills they are building can be used in daily. Here are a few examples of using multiplication facts in everyday life:

- We're buying 6 jars of spaghetti sauce. Each jar costs approximately $4. How much approximately will the 6 jars cost?
- There are 12 eggs in a carton and we have 4 people in our family. How many cartons of eggs do we need to buy if each person wanted to eat 2 eggs for breakfast everyday this week?
- There are 8 weeks until we leave for a trip! How can we calculate the number of days using multiplication?