

Family Math Night ~ 5th Grade, 1st Quarter

Teacher Summary Page

If you have not done a **Family Math Night** this year, you need to do the **Introductory Packet** (Kindergarten packet is slightly different from 1st through 5th grades) which provides an overview of the **Everyday Mathematics** curriculum.

Standards: 5.1.1.K1a (equivalent representations); 5.2.4.K1a (Patterns with array model)

Everyday Mathematics content:

Lesson 1.7 (Square Numbers) pages 47 - 51

Mathematical Objective – introducing square numbers

Take Home Game: The Factor Game

(using the playing cards)

Directions are included in this packet and the Family Math Packet

Materials needed:

Teacher materials:

- Chart paper or Smart Board to post the Math Message
- One copy of multiplication table per family
- Counters or color tiles or centimeter cubes for each family to build arrays

Parent materials to keep:

- Family Math Packet (**Factor Bingo** directions and game mat, **Factor Game** directions)
- A deck of cards for each family

Copies needed in addition to the Family Math Packet:

Extras of *Multiplication Table*, *Factor Bingo Game Mat*

Everyday Mathematics whole group lesson with parents (**10 minutes** for introduction section and then **30 minutes** for the lesson):

1. If you have not done a Family Math Night this year, you will need to get the Introductory Packet and use that for the first 10 minutes (suggestion – this could be done with all grade levels in a commons area before finishing the rest of the Math Night in grade level rooms)
2. Explain that you will be giving a sample lesson from the Everyday Mathematics curriculum.
3. Everyday Mathematics Grade 5 Teacher's Lesson Guide (Volume 1) page 48. Display the Math Message on chart or Smart Board. Complete the Math Message Follow-Up with the families. Explain that this part of the lesson is a warm up to get the kids thinking about the math needed for the lesson.
4. Then proceed with the *Whole Class Activity* (Finding Other Square Numbers) on page 49.
5. Instead of doing the *Independent Activity* (Investigating the Properties of Square Numbers) on page 49, use Multiplication Tables to do the *Small Group Activity* (Investigating Square Number Facts) on page 51. Have the families circle or highlight the square numbers and build the corresponding arrays. This is also a great time to have them explore the products on either side of the diagonal, which show the commutative property for multiplication (see Teacher Sample).
6. Or you may choose to have them color in (or cover with counters) all of the squares for each square number (see example). This also shows that the array for each square number has the same number of rows and columns.
7. Show the families how to play **Factor Bingo** (pg. 50) – they have directions in their packets.

Take Home Game details (15 minutes):

The Factor Game. Follow the directions in the Family Packet.

Evaluation (5 minutes):

1. Hand out the Evaluation page (Home Connections book page 65).