

NUMBER CONCEPTS SESSION

Activity: Finding Factors

Objective: Multiply by a two-digit number to estimate.

Materials: Find The Factors Activity Sheet
Markers
Calculators

Procedures:

1. Have pupils pair up and play the game.
2. Have extra copies on hand for pupils who finish ahead of others and wish to play a second game.
3. Use of different colored markers eases the need for extra copies.
4. For a quicker game, play for three, instead of four, marks in a row.
5. Using calculators allows pupils to really concentrate on estimation skills and allows the activity to move along quickly.
6. If pupils do not seem to be estimating products before selecting factors, take time to review rounding skills and techniques for approximating answers.
7. This activity can be completed as a whole class game with one side of the room competing against the other side. If you wish to use the activity in this manner, make a transparent copy of the worksheet and display it with an overhead projector. Playing the game as a whole class activity will give you more opportunities for discussion.

Notes:

1. Place game boards in a sheet protector (or have them laminated). Then use hand wipes to clean and play again.
2. Gifted and talented students seem to enjoy creating variations of this activity as much as doing it.
3. For younger children start with a regular tic-tac-toe board and smaller numbers to multiply.

Find The Factors

Basic Facts

2	8	14	10	6	12
3	48	45	16	8	21
40	12	56	18	54	35
4	63	7	24	15	9
18	5	42	72	20	32
6	28	27	30	24	36

1 2 3 4 5 6 7 8 9

Find the Factors

Follow the directions your teacher gives.

Factors: 11 32 49 73 92
 19 41 58 81

Game board:

1748	3577	779	1856	5336	1012
2842	5913	451	3772	1387	891
638	2336	608	352	4234	4508
1102	2592	7452	1568	931	209
3969	539	1312	2378	2944	1539
4698	2009	3321	6716	803	2993

Play this tic-tac-toe game with a partner. Use one worksheet for the two of you.

Take turns. Pick two numbers from the factors section. Find the product of the numbers. Place your mark (X or O) in the space with that product.

The winner is the first player to get four marks in a row, column, or diagonal.

factor used	factor used	product

factor used	factor used	product