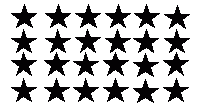
**Multiplication Strategies**

1. **Drawing an Array**

Use an equally organized picture (Array) to solve.

4 x 6 =

Draw 3 equal rows of 4 and count the total.

4 x 6 = 24

1. **Doubling and Repeated Doubling**

Used for equations with an even number.

***Doubling***

4 x 8 = 32

Use 2 x 8 = 16 then Double (16 x 2 or 16 + 16 = 32)

***Repeated Doubling***

8 x 8 = 64

Use 2 x 8 = 16 then Double Twice (16 x 2 = 32 and 32 x 2 = 64)

1. **0, 1, and 10 Rules**

0 x Any Number is Always 0 (0 x 8 = 0)

1 x Any Number is Always That Number (1 x 8 = 8)

10 x Any Number Add a Zero to That Number (10 x 8 = 80)

1. **Skip Counting**

5 x 8 = 40

Start at first number and skip by the second number.

5, 10, 15, 20, 25, 30, 35, 40

(8 Skips)

1. **Use Other Known Facts**

***2 for 3***

3 x 7 = 21

Use 2 x 7 = 14 (Then 14 + 7 = 21)

***5 for 6,7***

6 x 7 = 42

Use 5 x 7 = 35 (Then 35 + 7 = 42)

7 x 7 = 49

***10 for 9***

7 x 9 = 63

Use 7 x 10 = 70 (Then 70 – 7 = 63)

Use 5 x 7 = 35 (Then 35 + 7 + 7 =49)

1. **"9s" Hands and Fingers Trick**

7 x 9 =

Start on the Left Hand, Count 7 in and Put That Finger Down (2nd Finger Right Hand)

Remaining Fingers Make the Answer (6 and 3 = 63)

**Division Strategies**

**1) Draw an Array**

32 ÷ 4 = 8

Draw 32 counters in 4 rows and

then count how many end up in

each row.

8

**2) Use a Related Mulitiplication Fact**

32 ÷ 4 =

Think of a Multiplication fact that could help solve the Division equation.

4 x = 32 4 x 8 = 32 8

