Lesson 13

Course 2-Teacher Notes
Objective: TSW write and solve word problems about equal groups.

In this lesson we will solve word problems that have a multiplication thought pattern.

We've learned about different plots for word problems: Combining, Separating, Elapsed Time, Comparison

These "plot" word problems are called Equal Groups

Equal Groups Formula

Number Of Groups x Number In Each Group = Total → n x g = t

**To find the total, we multiply.
**To find an unknown factor, we divide the total by known factor.

Example 1.
Alexa packed 25 marbles in each box. If she filled 32 boxes, how many marbles did she pack in all?

Understand: Since each box contains the same number of marbles, this problem is about equal groups. Use the equal group formula.

Plan: Write an equation for the given information:
n x g = t

32 x 25 = T

Solve: 32 x 25 = 800

Alexa packed a total of 800 marbles.

Example 2.
Movie tickets were $8 each. The total ticket sales were $960. How many tickets were sold?

Write the formula: n x g = t
N x $8 = $960

Solve: $8\sqrt{960}$

Answer: 120 tickets were sold

Example 3.
Six hundred new cars were delivered to the dealer by 40 trucks, Each truck carried the same number of cars. How many cars were delivered by each truck?

Write the formula: n x g = t
40 x g = 600

Solve: How to you solve for a missing factor? Divide the total by the number of groups.

$40\sqrt{600}$

Answer: 15 cars were on each truck.

CW: 4, 5, 6, 1, 3, 7, 22, 27, ***2, 23, 28, 29, 30

HW: 2, 8-26, 28-30