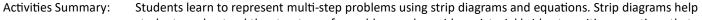TEKS Cluster: Whole Number Operations
TEKS Subcluster: All Operations of Whole Numbers
Student Expectations: 4.5(A)
Activities Summary: Students learn to represent multi-step problems using strip diagrams and equations. Strip diagrams help students understand the structure of a problem and provide a pictorial bridge to writing equations that represent the problem. Activities may be organized and delivered in three topics: **One-step Problems**, **One- and Two-step Problems**, and **Multi-step Problems**.

| **Activity Title** Student Expectations | **Activity Topic** | Type | | | Delivery | | |
|---|---|---|---|---|---|---|---|
| | | new learning | intervention | practice | teacher-facilitated | small groups | stations |
| **One-step Problems** | | | | | | | |
| **Beachville** 4.5(A) | **Strip Diagrams and Equations in 1-Step Problems** Students fill in the blanks in strip diagrams and equations, and solve problems. | ✓ | ✓ | | ✓ | | |
| **Go Figure** 4.5(A) | **Strip Diagrams and Equations in 1- Step Problems** In this card sort, students match cards to make strip diagrams and connect the strip diagrams to problems. They fill in labels in the strip diagrams, write equations, and solve. | | | ✓ | | ✓ | |
| **One- and Two-step Problems** | | | | | | | |
| **Mixed Measures** 4.5(A) | **Strip Diagrams and Equations in 1-and 2-Step Problems** In this round robin activity, students: <br>• Draw outline of the strip diagram and label the whole. <br>• Divide the strip diagram into segments. <br>• Add missing numbers and labels. <br>• Complete strip diagram if necessary and fill in the blanks on the equation. | | | ✓ | | ✓ | |
| **Cruising Along** 4.5(A) | **Strip Diagrams and Equations in 1-and 2-Step Problems** Students fill in missing pieces of strip diagram and equation, and solve problems. As a scaffold, the missing parts of the strip diagrams and the equations mirror each other. | | ✓ | ✓ | | ✓ | |
| **Tiger Tales** 4.5(A) | **Strip Diagrams and Equations in 1-and 2-Step Problems** This activity begins with a whole class discussion to determine the number of steps to solve the problems and why it takes that number of steps. Students draw strip diagrams and solve problems. | ✓ | ✓ | | ✓ | | |
| **Multi-step Problems** | | | | | | | |
| **Eric Steps Up** 4.5(A) | **Strip Diagrams and Equations with Multi-Step Problems** Students fill in blanks in strip diagrams, write equations, and solve problems. | | | ✓ | | ✓ | |
| **How Many?** 4.5(A) | **Strip Diagrams and Equations with Multi-Step Problems** Students draw strip diagrams, write equations, and solve problems. | | | ✓ | | ✓ | |