

Table 1 Common addition and subtraction situations¹

| | Result Unknown | Change Unknown | Start Unknown |
|--|--|--|--|
| Add to | Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? $2 + 3 = ?$ (K) | Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two? $2 + ? = 5$ (1 st) | Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? $? + 3 = 5$ One-Step Problem (2 nd) |
| | Five apples were on the table. I ate two apples. How many apples are on the table now? $5 - 2 = ?$ (K) | Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? $5 - ? = 3$ (1 st) | Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? $? - 2 = 3$ One-Step Problem (2 nd) |
| | Total Unknown | Addend Unknown | Both Addends Unknown ² |
| Put Together/ Take Apart ³ | Three red apples and two green apples are on the table. How many apples are on the table? $3 + 2 = ?$ (K) | Five apples are on the table. Three are red and the rest are green. How many apples are green? $3 + ? = 5, 5 - 3 = ?$ (K) | Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? $5 = 0 + 5, 5 = 5 + 0$ $5 = 1 + 4, 5 = 4 + 1$ $5 = 2 + 3, 5 = 3 + 2$ (1 st) |
| | | Difference Unknown | Bigger Unknown |
| Compare ⁴ | ("How many more?" version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? (1 st) | (Version with "more"): Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have? One-Step Problem (1 st) | (Version with "more"): Julie has 3 more apples than Lucy. Julie has five apples. How many apples does Lucy have? $5 - 3 = ? \quad ? + 3 = 5$ One-Step Problem (2 nd) |
| | ("How many fewer?" version): Lucy has two apples. Julie has five apples. How many fewer apples does Lucy have than Julie? $2 + ? = 5, 5 - 2 = ?$ (1 st) | (Version with "fewer"): Lucy has 3 fewer apples than Julie. Lucy has two apples. How many apples does Julie have? $2 + 3 = ?, 3 + 2 = ?$ One-Step Problem (2 nd) | (Version with "fewer"): Lucy has three fewer apples than Julie. Julie has five apples. How many apples does Lucy have? One-Step Problem (1 st) |

K: Problem types to be mastered by the end of the Kindergarten year.

1st: Problem types to be mastered by the end of the First Grade year, including problem types from the previous year(s). However, First Grade students should have experiences with all 12 problem types.

2nd: Problem types to be mastered by the end of the Second Grade year, including problem types from the previous year(s).