|  |
| --- |
| **OA Task 1a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Daniel had some stickers. His brother gave him 5 more stickers. Now Daniel has 18 stickers. How many stickers did Daniel have to start with?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.**Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 13 stickers
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* - 5 = 18; \* + 5 = 18).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Daniel had some stickers. His brother gave him 5 more stickers. Now Daniel has 18 stickers. How many stickers did Daniel have to start with?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stickers |

|  |
| --- |
| **OA Task 1b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Jayden has some baseball cards. His friend gave him 28 more baseball cards. Now Jayden has 95 baseball cards. How many baseball cards did John start with? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 67 baseball cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts
* Equation is accurate (e.g., 95 – 28 = \*; 28 + \* = 95).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Jayden has some baseball cards. His friend gave him 28 more baseball cards. Now Jayden has 95 baseball cards. How many baseball cards did Jayden start with?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ baseball cards |

|  |
| --- |
| **OA Task 1c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Alice has some pennies. Her dad gave her 48 more pennies. Now Alice has 83 pennies. How many pennies did Alice start with? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 35 pennies
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* + 48 = 83; 83 – 48 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Alice has some pennies. Her dad gave her 48 more pennies. Now Alice has 83 pennies. How many pennies did Alice start with?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pennies |

|  |
| --- |
| **OA Task 1d** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Nevaeh had some jewels. She gave 11 jewels to her sister. Now Nevaeh has 79 jewels. How many jewels did Nevaeh have to start with?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.**Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 90 jewels
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* - 11 = 48; \* + 11 = 48).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Nevaeh had some jewels. She gave 11 jewels to her sister. Now Nevaeh has 79 jewels. How many jewels did Nevaeh have to start with?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ jewels |

|  |
| --- |
| **OA Task 2a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Some baseball cards were on the table. Sam took 42 baseball cards. Then there were 26 baseball cards on the table. How many baseball cards were on the table before? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 68 baseball cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* - 42 = 26; 26 + 42 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Some baseball cards were on the table. Sam took 42 baseball cards. Then there were 26 baseball cards on the table. How many baseball cards were on the table before?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ baseball cards |

|  |
| --- |
| **OA Task 2b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Some players are on the basketball court. 14 players left. Then there were 16 players on the basketball court. How many players were on the basketball court before? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 30 players
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* - 14 = 16; 14 + 16 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Some players are on the basketball court. 14 players left. Then there were 16 players on the basketball court. How many players were on the basketball court before?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ players |

|  |
| --- |
| **OA Task 2c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Some fish are swimming in the stream. 23 fish swam away. Then there were 31 fish swimming in the stream. How many fish were swimming in the stream before? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 54 fish
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g. 23 + 31 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Some fish are swimming in the stream. 23 fish swam away. Then there were 31 fish swimming in the stream. How many fish were swimming in the stream before?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fish |

|  |
| --- |
| **OA Task 2d** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Start Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *There were some Legos in a bucket. 50 Legos spilled out of the bucket. Then there were 33 Legos in the bucket. How many Legos were in the bucket before? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 83 Legos
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 50 + 33 = \*; \* - 50 = 33).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**There were some Legos in a bucket. 50 Legos spilled out of the bucket. Then there were 33 Legos in the bucket. How many Legos were in the bucket before?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Legos |

|  |
| --- |
| **OA Task 3a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Daniella has 9 more bracelets than Katie. Katie has 22 bracelets. How many bracelets does Daniella have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 31 bracelets
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 9 + 22 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Daniella has 9 more bracelets than Katie. Katie has 22 bracelets. How many bracelets does Daniella have?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bracelets |

|  |
| --- |
| **OA Task 3b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Carlos has 13 more comic books than his friend David. Carlos has 30 comic books. How many comic books does David have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 17 comic books
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 30 – 13 = \*; 13 + \* = 30)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Carlos has 13 more comic books than his friend David. Carlos has 30 comic books. How many comic books does David have?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ comic books |

|  |
| --- |
| **OA Task 3c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Kevin has 23 more shiny rocks than his friend Matthew. Kevin has 27 shiny rocks. How many shiny rocks does Matthew have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 50 shiny rocks
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 23 + 27 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Kevin has 23 more shiny rocks than his friend Matthew. Kevin has 27 shiny rocks. How many shiny rocks does Matthew have?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shiny rocks |

|  |
| --- |
| **OA Task 3d** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Makayla has 22 more mini mystery books than her sister Brittany. Makayla has 40 mini mystery books. How many mini mystery books does Brittany have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 18 mini mystery books
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 22 + 40 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Makayla has 22 more mini mystery books than her sister Brittany. Makayla has 40 mini mystery books. How many mini mystery books does Brittany have?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mini mystery books |

|  |
| --- |
| **OA Task 4a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Luke has 5 fewer books than Josh. Luke has 7 books. How many books does Josh have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 2 books
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 5 + 7 = \*; 7 + 5 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Luke has 5 fewer books than Josh. Luke has 7 books. How many books does Josh have?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ books |

|  |
| --- |
| **OA Task 4b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *The 2nd grade class has 9 fewer students than the 3rd grade class. The 2nd grade class has 22 students. How many students are in the 3rd grade class?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 31 students
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 9 + 22 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**The 2nd grade class has 9 fewer students than the 3rd grade class. The 2nd grade class has 22 students. How many students are in the 3rd grade class?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ students |

|  |
| --- |
| **OA Task 4c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *There are 36 fewer apples in the box than apples on the ground. There are 50 apples in the box. How many apples are on the ground? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 86 apples
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 36 + 50 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**There are 36 fewer apples in the box than apples on the ground. There are 50 apples in the box. How many apples are on the ground?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ apples |

|  |
| --- |
| **OA Task 4d** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *There are 11 fewer cinnamon candies than chocolate candies. There are 30 cinnamon candies. How many chocolate candies are there? Write an equation that represents this problem. Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 41 chocolate candies
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 30 + 11 = \*; 11 = \* - 30)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**There are 11 fewer cinnamon candies than chocolate candies. There are 30 cinnamon candies. How many chocolate candies are there?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chocolate candies |

|  |
| --- |
| **OA Task 5a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Result Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *John collected 67 baseball cards. His friend gave him 28 more baseball cards. How many cards does John have now? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 95 baseball cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 67 + 28 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**John collected 67 baseball cards. His friend gave him 28 more baseball cards. How many cards does John have now?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ baseball cards |

|  |
| --- |
| **OA Task 5b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To-Result Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Val has 26 butterflies for the Science Fair. Sam brought 38 more butterflies for the Science Fair. How many butterflies did they take to the science fair?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 64 butterflies
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 26 + 38 = \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| 1. **Makes sense and perseveres in solving problems.** |
| 2. **Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Val has 26 butterflies for the Science Fair. Sam brought 38 more butterflies for the Science Fair. How many butterflies did they take to the science fair?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ butterflies |

|  |
| --- |
| **OA Task 5c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To- Result Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Ana brought 6 DVDs to a party. Mark brought 7 DVDs to the party. Steve brought 8 DVDs to the party. How many DVDs do they have for the party?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 21 DVDs
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 6 + 7 + 8 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Ana brought 6 DVDs to a party. Mark brought 7 DVDs to the party. Steve brought 8 DVDs to the party. How many DVDs do they have for the party?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DVDs |

|  |
| --- |
| **OA Task 5d** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To -Result Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Benjamin has 7 baseball cards. Kyle gave Benjamin 8 baseball cards. Jim gave Benjamin 3 more baseball cards. How many cards does Benjamin have now?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 18 baseball cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 7 + 8 + 3 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Benjamin has 7 baseball cards. Kyle gave Benjamin 8 baseball cards. Jim gave Benjamin 3 more baseball cards. How many cards does Benjamin have now?**

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cards |

|  |
| --- |
| **OA Task 6a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To: Change Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Lucas had 67 baseball cards. His friend gave Lucas some more baseball cards. Now Lucas has 95 baseball cards. How many baseball cards did his friend give Lucas? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 28 baseball cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 65 + \* = 95)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Lucas had 67 baseball cards. His friend gave Lucas some more baseball cards. Now Lucas has 95 baseball cards. How many baseball cards did his friend give Lucas?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ baseball cards |

|  |
| --- |
| **OA Task 6b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To: Change Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Jalen had 30 marbles. When he cleaned out his closet he found some more marbles. Now Jalen has 58 marbles. How many marbles did Jalen find?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 28 marbles
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 30 + \* = 58; 58 – 30 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Jalen had 30 marbles. When he cleaned out his closet he found some more marbles. Now Jalen has 58 marbles. How many marbles did Jalen find?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ marbles |

|  |
| --- |
| **OA Task 6c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Add To: Change Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Pam has 17 cards of animals from Africa. She has some cards from other continents. All together she has 90 cards. How many cards are from other continents?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 73 cards
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* = 90 – 17; 90 = \* + 17)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Pam has 17 cards of animals from Africa. She has some cards from other continents. All together she has 90 cards. How many cards are from other continents?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cards |

|  |
| --- |
| **OA Task 7a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Result Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *60 apples were on the shelf. 23 apples were sold. How many apples are on the shelf now?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Basic Facts
* Creates easier or known sums
* Doubles
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 37 apples
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 60 – 23 = \*; 23 + \* = 60)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

60 apples were on the shelf. 23 apples were sold. How many apples are on the shelf now?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ apples |

|  |
| --- |
| **OA Task 7b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From- Result Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Mrs. Hope’s class saw 76 butterflies in the garden. Some of the butterflies flew away. Now there are 49 butterflies in the garden. How many butterflies flew away?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 27 butterflies
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 76 – 49 = \*; 76 = 49 + \*).
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Mrs. Hope’s class saw 76 butterflies in the garden. Some of the butterflies flew away. Now there are 49 butterflies in the garden. How many butterflies flew away?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ butterflies |

|  |
| --- |
| **OA Task 7c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From-Result Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Avi drew 5 pictures to enter in the school art contest. Erick drew 7 pictures. Avi spilled water on 2 of his pictures and ruined them. How many pictures will Avi and Erick enter in the contest?* *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 10 pictures
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Avi drew 5 pictures to enter in the school art contest. Erick drew 7 pictures. Avi spilled water on 2 of his pictures and ruined them. How many pictures will Avi and Erick enter in the contest?

|  |
| --- |
| Solve the problem.Use words, numbers or pictures to explain your reasoning. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pictures |

|  |
| --- |
| **OA Task 8a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From- Change Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student:  *The principal had 38 balloons. Some balloons popped. Then the principal had 19 balloons. How many balloons popped? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 17 balloons
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 38 - \* = 19; 19 + \* = 38)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

The principal had 38 balloons. Some balloons popped. Then the principal had 19 balloons. How many balloons popped?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ balloons |

|  |
| --- |
| **OA Task 8b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From- Change Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student:  *12 children were on the baseball field. Some children left the baseball field to play on the swings. Then 2 more children came to the baseball field. Now there are 8 children on the baseball field. How many children left to play on the swings? Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 6 children left the baseball field
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

12 children were on the baseball field. Some children left the baseball field to play on the swings. Then 2 more children came to the baseball field. Now there are 8 children on the baseball field. How many children left to play on the swings?

|  |
| --- |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ children |

|  |
| --- |
| **OA Task 8c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Take From- Change Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student:  *The zoo had 7 cows and some horses in the big pen. There were 15 animals in the big pen. Then 4 more horses ran into the big pen. How many horses are there now? Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 12 horses
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

The zoo had 7 cows and some horses in the barn. There were 15 animals in the barn. Then 4 more horses ran into the barn. How many horses are there now?

|  |
| --- |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ horses |

|  |
| --- |
| **OA Task 9a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart – Total Unknown, One-step*  |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Erick has 32 glass marbles and 21 steel marbles. How many marbles does Erick have? Write an equation that represents this problem. Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 53 marbles
* Successfully uses strategies such as making tens, basic facts, and creating easier or known sums.
* Equation is accurate (e.g., 32 + 21 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Erick has 32 glass marbles and 21 steel marbles. How many marbles does Erick have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ marbles |

|  |
| --- |
| **OA Task 9b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart – Total Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Sue has some DVDs. She has 3 comedies, 4 cartoons and 11 adventures. How many DVDs does Sue have? Write an equation that represents this problem. Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 18 DVDs
* Successfully uses strategies such as basic facts and making tens.
* Equation is accurate (e.g., 3 + 4 + 11 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Sue has some DVDs. She has 3 comedies, 4 cartoons and 11 adventures. How many DVDs does Sue have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DVDs |

|  |
| --- |
| **OA Task 9c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart – Total Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Linda’s cat had a litter of kittens. 3 kittens were black. 3 kittens were spotted. 2 kittens were orange. How many kittens were in the litter? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 8 kittens
* Successfully uses strategies such as basic facts.
* Equation is accurate (e.g., 3 + 3 + 2 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Linda’s cat had a litter of kittens. 3 kittens were black. 3 kittens were spotted. 2 kittens were orange. How many kittens were in the litter?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kittens |

|  |
| --- |
| **OA Task 10a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem. **2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart –Addend Unknown, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *There are 25 children on the soccer team. 15 are boys and the rest are girls. How many soccer players are girls? Write an equation that represents this problem. Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 10 girls
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts
* Equation is accurate (e.g., 25 = 15 + \*; 25 – 15 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

There are 25 children on the soccer team. 15 are boys and the rest are girls. How many soccer players are girls?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ girls |

|  |
| --- |
| **OA Task 10b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem. **2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart –Addend Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Alyssa has cats, dogs and fish for pets. She has 15 pets. She has 10 goldfish and 2 cats. How many dogs does Alyssa have? Use words, numbers or pictures to solve the problem and explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 3 dogs
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Alyssa has cats, dogs and fish for pets. She has 15 pets. She has 10 goldfish and 2 cats. How many dogs does Alyssa have?

|  |
| --- |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dogs |

|  |
| --- |
| **OA Task 10c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using drawings and equations with a symbol for the unknown number to represent the problem. **2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart –Addend Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Jada has some apples. 7 apples are green. 5 apples are red. 6 apples are yellow. How many apples does Jada have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 18 apples
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts
* Equation is accurate (e.g., \* = 7 + 5 + 6)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Jada has some apples. 7 apples are green. 5 apples are red. 6 apples are yellow. How many apples does Jada have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ apples |

|  |
| --- |
| **OA Task 11a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart-Both Addends Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Sally saw horses in a field. She counted 10 horses. Some horses were brown, some horses were gray, and some horses were black. How many brown, gray, and black horses did she see? Find as many different combinations as you can. Use words, numbers or pictures to explain your reasoning. Write a number sentence for each combination*. Prompt if needed: *Can you find another combination?* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Identifies one or more combinations that do not equal 10.
* Finds only 1 or 2 combinations, even with prompting.
* Relies on ‘counting all’ as primary strategy for solving the problem.
* One or more equations are inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Trial and Error
* Counting All
* Counting On
* Basic Facts
* Commutative property
* Doubles
* Doubles +/- 1, 2
* Other:

Possible Combinations\*:1 + 1 + 8 = 101 + 2 + 7 = 101 + 3 + 6 = 101 + 4 + 5 = 10\*Similar combinations due to the commutative property of addition. |
| **Complete Understanding** | * Shows all 4 combinations that equal to 10, using strategies other than counting all.
* Provides a clear explanation.
* Equations are accurate.
 |
| **Advanced Understanding** | Demonstrates complete understanding and:* Shows awareness of an emerging number pattern or records results systematically.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

Sally saw horses in a field. She counted 10 horses. Some horses were brown, some horses were gray, and some horses were black. How many brown, gray, and black horses did she see?

|  |
| --- |
| Find as many different combinations as you can. Use words, numbers or pictures to explain your reasoning. Write a number sentence for each combination.  |

|  |
| --- |
| **OA Task 11b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Put Together/Take Apart-Both Addends Unknown, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Allen has cats and dogs. He has 16 pets. If he has at least 10 cats, how many cats and dogs could he have? Find as many different ways as you can. Use words, numbers or pictures to explain your reasoning. Write a number sentence for each combination*. Prompt if needed: *Can you find another combination?* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Identifies one or more combinations that do not equal 16.
* Finds only 1 or 2 combinations, even with prompting.
* Relies on ‘counting all’ as primary strategy for solving the problem.
* One or more equations are inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Trial and Error
* Counting All
* Counting On
* Basic Facts
* Commutative property
* Doubles
* Doubles +/- 1, 2
* Other:

Possible Combinations\*:10 + 6 = 1611 + 5 = 1612 + 4 = 1613 + 3 = 1614 + 2 = 1615 + 1 = 16\*Similar combinations due to the commutative property of addition. |
| **Complete Understanding** | * Finds 4 or more combinations.
* Uses strategies other than counting.
* Provides a clear explanation.
* Equations are accurate.
 |
| **Advanced Understanding** | Demonstrates complete understanding and:* Shows awareness of an emerging number pattern or records results systematically.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Allen has cats and dogs. He has 16 pets. If he has at least 10 cats, how many cats and dogs could he have?

|  |
| --- |
| Find as many different ways as you can. Use words, numbers or pictures to explain your reasoning. Write a number sentence for each combination.  |

|  |
| --- |
| **OA Task 12a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Olivia has 45 sparkle markers. Makayla has 28 sparkle markers. How many more sparkle markers does Olivia have than Makayla? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 17 sparkle markers
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 45 – 28 = \*; 28 + \* = 45)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Olivia has 45 sparkle markers. Makayla has 28 sparkle markers. How many more sparkle markers does Olivia have than Makayla?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_sparkle markers |

|  |
| --- |
| **OA Task 12b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: More, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Zoe stood on one foot for 55 seconds. Felipe stood on one foot for 38 seconds. How many more seconds did Zoe stand on one foot than Felipe? Write an equation that represents this problem. Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 17 seconds
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 55 – 38 = \*; 38 + \* = 55)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Zoe stood on one foot for 55 seconds. Felipe stood on one foot for 38 seconds. How many more seconds did Zoe stand on one foot than Felipe?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_seconds |

|  |
| --- |
| **OA Task 12c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: More, Two-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Tyler earned 50 points at the Beanbag Toss game. Jack earned 21 points at the Beanbag Toss game. Andrew earned 20 points at the Beanbag Toss game. If Tyler and Jack put their points together, how many more points would they have than Andrew? Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 51 points
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Tyler earned 50 points at the Beanbag Toss game. Jack earned 21 points at the Beanbag Toss game. Andrew earned 20 points at the Beanbag Toss game. If Tyler and Jack put their points together, how many more points would they have than Andrew?

|  |
| --- |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_points |

|  |
| --- |
| **OA Task 13a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: More, One-step*  |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *There are 24 more pieces of candy in the purple box than in the red box. The red box has 15 pieces of candy. How many pieces of candy are in the purple box? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 39 pieces of candy
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 24 + 15 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

There are 24 more pieces of candy in the purple box than in the red box. The red box has 15 pieces of candy. How many pieces of candy are in the purple box?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pieces |

|  |
| --- |
| **OA Task 13b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: More, One-step*  |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Joe has 19 more toy cars than Larry. Larry has 8 toy cars. How many toy cars does Joe have? Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 27 toy cars
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 19 + 8 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Joe has 19 more toy cars than Larry. Larry has 8 toy cars. How many toy cars does Joe have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ toy cars |

|  |
| --- |
| **OA Task 13c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Bigger Unknown: More, One-step*  |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *The blue team has 5 more girls than the red team. The red team has 18 girls. How many girls are on the blue team?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 23 girls
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., \* = 18 + 5)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

The blue team has 5 more girls than the red team. The red team has 18 girls. How many girls are on the blue team?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ girls |

|  |
| --- |
| **OA Task 14a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Justin has 19 bottle caps. Elijah has 71 bottle caps. How many fewer bottle caps does Justin have than Elijah?**Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 52 bottle caps
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 71 – 19 = \*; 71 = 19 + \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Justin has 19 bottle caps. Elijah has 71 bottle caps. How many fewer bottle caps does Justin have than Elijah?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_bottle caps |

|  |
| --- |
| **OA Task 14b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *The rocket puzzle has 51 pieces. The boat puzzle has 100 pieces. How many fewer puzzle pieces does the rocket puzzle have than the boat puzzle?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 49 pieces
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 100 – 51 = \*; 100 = 51 + \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

The rocket puzzle has 51 pieces. The speed boat puzzle has 100 pieces. How many fewer puzzle pieces does the rocket puzzle have than the speed boat puzzle?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_puzzle pieces |

|  |
| --- |
| **OA Task 14c** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Difference Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Samantha has 37 beads. Andrea has 76 beads. How many fewer beads does Samantha have than Andrea?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 39 beads
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 37 + \* = 76; 76 – 37 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Samantha has 37 beads. Andrea has 76 beads. How many fewer beads does Samantha have than Andrea?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_beads |

|  |
| --- |
| **OA Task 15a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Evan has 20 fewer raisins than Kayla. Kayla has 31 raisins. How many raisins does Evan have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 11 raisins
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 31 – 20 = \*; 20 + \* = 31)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Evan has 20 fewer raisins than Kayla. Kayla has 31 raisins. How many raisins does Evan have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_raisins |

|  |
| --- |
| **OA Task 15b** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Represent and solve problems involving addition & subtraction.Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.**2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.**2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.*Compare- Smaller Unknown: Fewer, One-step* |
| **Materials** | SF, Pencil, Paper, counters and base ten materials available |
| **Task** | Provide materials to the student. Read the problem to the student: *Amanda has 14 fewer stuffed animals than Beth. Beth has 40 stuffed animals. How many stuffed animals does Amanda have?* *Write an equation that represents this problem.* *Use a symbol for the unknown number.*Once an equation is written, say: *Solve the problem and use words, numbers or pictures to explain your reasoning.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Incorrectly solves the problem.
* Relies on counting as primary strategy for solving problem.
* Equation is inaccurate.
* Explanation is lacking in detail or non-existent.
 | Strategy(ies) Used:* Counting All
* Counting On
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Doubles +/- 1, 2
* Other:
 |
| **Complete Understanding** | * Correctly solves the problem: 26 stuffed animals
* Successfully uses strategies such as making tens, creates easier or known sums, and basic facts.
* Equation is accurate (e.g., 40 = 14 + \*, 40 – 14 = \*)
* Explanation is clear.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

Amanda has 14 fewer stuffed animals than Beth. Beth has 40 stuffed animals. How many stuffed animals does Amanda have?

|  |
| --- |
| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.Use words, numbers or pictures to explain your reasoning.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_stuffed animals |

|  |
| --- |
| **OA Task 16a** |
| **Domain** | Operations and Algebraic Thinking |
| **Cluster** | Work with equal groups of objects to gain foundations for multiplication. |
| **Standard(s)** | **2.OA.3** Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. |
| **Materials** | Paper, pencil, counters |
| **Task** | Provide the materials to the student. Say: *Is 12 an even number? Explain your reasoning with counters, pictures, numbers or words.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * States that 12 is not an even number.
* Student only provides justification that it “ends in a 2”.
* Justification does not indicate an understanding that even numbers can be made of two equal parts with no leftovers.
 | Strategy (ies) Used:* “One-for you, One-for me”
* Pairs objects
* Counts by 2s
* Uses doubles
* Other:
 |
| **Complete Understanding** | * States that 12 is an even number.
* Justification indicates an understanding that even numbers can be made of two equal parts with no leftovers.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

|  |
| --- |
| **OA Task 16b** |
| **Domain** | Operations and Algebraic Thinking |
| **Cluster** | Work with equal groups of objects to gain foundations for multiplication. |
| **Standard(s)** | **2.OA.3** Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. |
| **Materials** | Paper, pencil, objects or counters. |
| **Task** | Provide the materials to the student. Say: *Is 15 an even number? Explain your reasoning with counters, pictures, numbers or words.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * States that 15 is an even number.
* Student only provides justification that it “ends in a 5”.
* Justification does not indicate an understanding that odd numbers cannot be made of two equal parts.
 | Strategy (ies) Used:* “One-for you, One-for me”
* Pairs objects
* Counts by 2s
* Uses doubles
* Other:
 |
| **Complete Understanding** | * States that 15 is not an even number.
* Justification indicates an understanding that odd numbers cannot be made of two equal parts.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| **5. Uses appropriate tools strategically.** |
| 6. **Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

|  |
| --- |
| **OA Task 17a** |
| **Domain** | Operations and Algebraic ThinkingNumber and Operations in Base Ten |
| **Cluster** | Work with equal groups of objects to gain foundations for multiplication.Understand place value. |
| **Standard(s)** | **2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. **2.NBT.2** Count within 1000; skip-count by 5s, 10s, and 100s. |
| **Materials** | BLM- Picture of 5 by 5 array of stars, pencil, objects or counters available. |
| **Task** | Provide materials to the student. Read the problem to the student: *How many stars are in the box? Write an equation with equal addends to express the total.*  |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Counts by ones to determine total amount.
* If skip counts, counts by groups other than 5.
* If skip counts, counts by 5 incorrectly.
* Equation does not illustrate five groups of 5.
 | Strategy(ies) Used:* Skip Counts
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Other:
 |
| **Complete Understanding** | * Equation indicates the there are five groups of 5.

 (5 + 5 + 5 + 5 + 5 = 25). * Correctly determines that there are 25 stars in the box.
 |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. **Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |



|  |
| --- |
| **OA Task 17b** |
| **Domain** | Operations and Algebraic Thinking |
| **Cluster** | Work with equal groups of objects to gain foundations for multiplication.Understand place value. |
| **Standard(s)** | **2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.  |
| **Materials** | Pencil, paper, 16 square tiles. |
| **Task** | Provide the materials to the student. Read the problem to the student: *Use 8 tiles to make an array. Describe the array.* Prompt if needed: *How many rows are there? How many columns are there?* Then say: *Draw a picture of your array. Write an equation to illustrate your array.*When the student has finished with the first array, say: *Use 8 more tiles to make a different array. Describe the array.* Prompt if needed: *How many rows are there? How many columns are there?* Then say: *Draw a picture of your array. Write an equation to illustrate your array.* |

|  |
| --- |
| **Continuum of Understanding** |
| **Developing Understanding** | * Uses 8 tiles, but does not create an array.
* Creates one array but does not create a second array that is different or correct.
* If skip counts, counts incorrectly.
* Drawing(s) does not represent array(s) created.
* Equation(s) does not indicate repeated groups.
 | Strategy(ies) Used:* Skip Counts
* Makes Tens
* Basic Facts
* Creates easier or known sums
* Doubles
* Other:

Possible Solutions:1 row of 8 8 + 08 rows of 11 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 84 rows of 22 + 2 + 2 + 2 = 82 rows of 44 + 4 = 8 |
| **Complete Understanding** | * Creates two different arrays with the tiles.
* Drawings accurately represent arrays created.
* Equations indicate repeated groups

(e.g., 2 + 2 + 2 + 2 = 8). |

|  |
| --- |
| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. **Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**One-more-than - Two-more-than**

Use the strategy of one-more-than and two-more- than to solve these problems.

|  |  |
| --- | --- |
| 1. **1 + 9 = \_\_\_\_\_\_\_**
 | 1. **2 + 8 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 1 = \_\_\_\_\_\_\_**
 | 1. **7 + 2 = \_\_\_\_\_\_\_**
 |
| 1. **6 + 1 = \_\_\_\_\_\_\_**
 | 1. **5 + 1 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 6 + 2**
 | 1. **\_\_\_\_\_\_\_ = 1 + 8**
 |
| 1. **\_\_\_\_\_\_\_ = 9 + 2**
 | 1. **\_\_\_\_\_\_\_ = 4 + 2**
 |

**Facts with Zero**

Use the strategy of Zero Facts to solve these problems.

|  |  |
| --- | --- |
| 1. **0 + 9 = \_\_\_\_\_\_\_**
 | 1. **0 + 8 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 0 = \_\_\_\_\_\_\_**
 | 1. **4 + 0 = \_\_\_\_\_\_\_**
 |
| 1. **0 + 0 = \_\_\_\_\_\_\_**
 | 1. **5 + 0 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 3 + 0**
 | 1. **\_\_\_\_\_\_\_ = 0 + 1**
 |
| 1. **\_\_\_\_\_\_\_ = 7 + 0**
 | 1. **\_\_\_\_\_\_\_ = 2 + 0**
 |

**Doubles Plus Two**

Use the strategy of Near Doubles: Plus Two to solve these problems.

|  |  |
| --- | --- |
| 1. **7 + 9 = \_\_\_\_\_\_\_**
 | 1. **6 + 8 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 5 = \_\_\_\_\_\_\_**
 | 1. **6 + 4 = \_\_\_\_\_\_\_**
 |
| 1. **2 + 4 = \_\_\_\_\_\_\_**
 | 1. **5 + 7 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 3 + 5**
 | 1. **\_\_\_\_\_\_\_ = 3 + 1**
 |
| 1. **\_\_\_\_\_\_\_ = 8 + 6**
 | 1. **\_\_\_\_\_\_\_ = 9 + 7**
 |

**Doubles Plus One**

Use the strategy of Near Doubles: Plus One to solve these problems.

|  |  |
| --- | --- |
| 1. **9 + 8 = \_\_\_\_\_\_\_**
 | 1. **7 + 8 = \_\_\_\_\_\_\_**
 |
| 1. **6 + 7 = \_\_\_\_\_\_\_**
 | 1. **4 + 5 = \_\_\_\_\_\_\_**
 |
| 1. **0 + 1 = \_\_\_\_\_\_\_**
 | 1. **5 + 6 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 3 + 4**
 | 1. **\_\_\_\_\_\_\_ = 1 + 2**
 |
| 1. **\_\_\_\_\_\_\_ = 8 + 9**
 | 1. **\_\_\_\_\_\_\_ = 2 + 3**
 |

**Make-Ten Facts**

Use the strategy of Making Tens to solve these problems.

|  |  |
| --- | --- |
| 1. **7 + 9 = \_\_\_\_\_\_\_**
 | 1. **6 + 8 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 5 = \_\_\_\_\_\_\_**
 | 1. **6 + 9 = \_\_\_\_\_\_\_**
 |
| 1. **8 + 4 = \_\_\_\_\_\_\_**
 | 1. **5 + 9 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 3 + 9**
 | 1. **\_\_\_\_\_\_\_ = 8 + 3**
 |
| 1. **\_\_\_\_\_\_\_ = 8 + 9**
 | 1. **\_\_\_\_\_\_\_ = 7 + 8**
 |

**Doubles Plus Two**

Use the strategy of Near Doubles: Plus Two to solve these problems.

|  |  |
| --- | --- |
| 1. **9 + 7 = \_\_\_\_\_\_\_**
 | 1. **7 + 5 = \_\_\_\_\_\_\_**
 |
| 1. **6 + 4 = \_\_\_\_\_\_\_**
 | 1. **3 + 5 = \_\_\_\_\_\_\_**
 |
| 1. **8 + 6 = \_\_\_\_\_\_\_**
 | 1. **4 + 6 = \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 3 + 5**
 | 1. **\_\_\_\_\_\_\_ = 7 + 9**
 |
| 1. **\_\_\_\_\_\_\_ = 5 + 7**
 | 1. **\_\_\_\_\_\_\_ = 6 + 8**
 |

**Make Ten Extend-with 7**

Use the strategy of Making Tens to solve these problems.

|  |  |
| --- | --- |
| 1. **9 + 7 = \_\_\_\_\_\_\_**
 | 1. **7 + 5 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 4 = \_\_\_\_\_\_\_**
 | 1. **3 + 7 = \_\_\_\_\_\_\_**
 |
| 1. **7 + 6 = \_\_\_\_\_\_\_**
 | 1. **7 + 8= \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 5 + 7**
 | 1. **\_\_\_\_\_\_\_ = 7 + 9**
 |
| 1. **\_\_\_\_\_\_\_ = 8 + 7**
 | 1. **\_\_\_\_\_\_\_ = 7 + 4**
 |

**Making Connections**

Solve.

|  |  |
| --- | --- |
| 4 + 5 = \_\_\_\_\_\_\_ | 6 – 4 = \_\_\_\_\_\_\_ |
| 2 + 6 = \_\_\_\_\_\_\_ | 8 - 3 = \_\_\_\_\_\_\_ |
| 5 + 2 = \_\_\_\_\_\_\_ | 8 – 6 = \_\_\_\_\_\_\_ |
| 7 – 2 = \_\_\_\_\_\_\_ | 9 – 4 = \_\_\_\_\_\_\_ |
| 4 + 2 = \_\_\_\_\_\_\_ | 9 – 6 = \_\_\_\_\_\_\_ |
| 8 – 5 = \_\_\_\_\_\_\_ | 3 + 5 = \_\_\_\_\_\_\_ |
| 7 – 5 = \_\_\_\_\_\_\_ | 6 + 2 = \_\_\_\_\_\_\_ |
| 9 – 5 = \_\_\_\_\_\_\_ | 5 + 2 = \_\_\_\_\_\_\_ |

**Build Up Through Ten**

Use the strategy of making tens to solve the problems.

|  |  |
| --- | --- |
| 1. **13 - 9 = \_\_\_\_\_\_\_**
 | 1. **15 - 9 = \_\_\_\_\_\_\_**
 |
| 1. **14 - 8 = \_\_\_\_\_\_\_**
 | 1. **13 - 8 = \_\_\_\_\_\_\_**
 |
| 1. **12 - 8 = \_\_\_\_\_\_\_**
 | 1. **11 - 8= \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 14 - 9**
 | 1. **\_\_\_\_\_\_\_ = 12 - 9**
 |
| 1. **\_\_\_\_\_\_\_ = 15 - 8**
 | 1. **\_\_\_\_\_\_\_ = 11 - 9**
 |

**Back Down Through Ten**

Use the strategy of using ten to solve the problems.

|  |  |
| --- | --- |
| 1. **14 - 6 = \_\_\_\_\_\_\_**
 | 1. **15 - 6 = \_\_\_\_\_\_\_**
 |
| 1. **13 - 4 = \_\_\_\_\_\_\_**
 | 1. **14 - 5 = \_\_\_\_\_\_\_**
 |
| 1. **12 - 3 = \_\_\_\_\_\_\_**
 | 1. **11 - 2= \_\_\_\_\_\_\_**
 |
| 1. **\_\_\_\_\_\_\_ = 15 - 7**
 | 1. **\_\_\_\_\_\_\_ = 13 - 5**
 |
| 1. **\_\_\_\_\_\_\_ = 14 - 6**
 | 1. **\_\_\_\_\_\_\_ = 11 - 3**
 |