## Cognitively Guided Instruction Addition and Subtraction Problem Types

| Join, Result Unknown <br>  <br>  <br> Separate, Result Unknown | Join, Change Unknown | Join, Start Unknown |
| :---: | :---: | :---: |
|  | Join, Change Unknown | Join, Start Unknown |
|  | Separate, Change Unknown | Separate, Start Unknown |
| Part-Part-Whole, Whole Unknown $\quad$ Part-Part-Whole, Part Unknown |  |  |
| Compare, Different Unknown | Compare, Compare Quantity Unknown | Compare, Referent Unknown |

## Cognitively Guided Instruction Story Problems (Single Digit Addends)

| Join, Result Unknown <br> Jadyn had 3 flowers. She picked 8 more <br> flowers. How many flowers does Jadyn <br> have now? | Join, Change Unknown <br> Camilla has 7 dollars. She wants to buy a <br> book that costs 11 dollars. How much <br> more does she need to save so she can buy <br> the book? | Join, Start Unknown <br> Kevin has some toy cars. He went to the <br> store and bought 6 more cars and then he <br> had 15 cars. How many cars did Kevin <br> have to start with? |
| :--- | :--- | :--- |
| Separate, Result Unknown <br> There were 15 seeds on the ground. A bird <br> ate 7 of the seeds. How many seeds are on <br> the ground now? | Separate, Change Unknown <br> Sam had 8 animal crackers. His sister ate <br> some of them. Now Sam has 6 animal <br> crackers. How many animal crackers did <br> his sister eat? | Separate, Start Unknown <br> Max had some money. He spent \$9 on a <br> video game. Now he has \$7 left. How <br> much money did Max have to start with? |
| Part-Part-Whole, Whole Unknown <br> Fifteen girls and 5 boys were playing soccer. How many children <br> were playing soccer? | Part-Part-Whole, Part Unknown <br> Destyni is holding some pennies and quarters. She is holding 12 <br> coins. If we know she has 2 quarters, how many pennies is she <br> holding? |  |
| Compare, Different Unknown <br> Isabella has 4 pencils. Natalie has 9 <br> pencils. How many more pencils does <br> Natalie have than Isabella? | Compare, Compare Quantity Unknown <br> Coleman has 11 books. Kevin has 6 books <br> more than Coleman. How many books <br> does Kevin have? | Compare, Referent Unknown <br> Melleri has 13 stickers. She has 5 more <br> stickers than Kenzie. How many stickers <br> does Kenzie have? |

## CGI Story Problems written by Annie Keith for Second and Third graders

| Join, Result Unknown <br> Maureen had 46 fossils. Kate gave her 64 <br> more fossils. How many fossils does <br> Maureen have now? | Join, Change Unknown <br> Russ has 124 rocks in his collection. <br> Christie, his sister, gave him a box of <br> rocks for his birthday. Now Russ has 143 <br> rocks in his collection. How many rocks <br> did his sister give to him? | Join, Start Unknown <br> Eve found pebbles before going to the <br> beach. She found 78 more pebbles while <br> playing at the beach. She counted her <br> pebbles when she got home and found <br> that she had 194 pebbles. How many <br> pebbles did she have before she went to <br> the beach? |
| :--- | :--- | :--- |
| Separate, Result Unknown <br> Kevin has 146 rocks. He gave 78 of them <br> to Judith. How many rocks does Kevin <br> have? | Separate, Change Unknown <br> Ashley had 57 pebbles in her backpack. <br> When she arrived at school she had 29 <br> pebbles. How many pebbles did she lose <br> on her way to school? | Separate, Start Unknown <br> Paul had some rocks in a bucket. He gave <br> 26 rocks to Briana. Now he has 87 rocks. <br> How many rocks did Paul have in the <br> bucket to start? |
| Part-Part-Whole, Whole Unknown <br> On their neighborhood walk Ms. Levi's class found 45 pieces of <br> sandstone and 76 pieces of granite. How many rocks did the class <br> find on their neighborhood walk? | Part-Part-Whole, Part Unknown <br> Take agates. How many agates does Takara have? <br> are |  |
| Compare, Difference Unknown <br> Sandy has 39 fossils. Rick has 106 <br> fossils. How many fewer fossils does <br> Sandy have then Rick? | Compare, Compare Quantity Unknown <br> Andy has 343 rocks in his rock collection. <br> Eve has 127 more rocks than Andy. How <br> many rocks does Eve have? | Compare, Referent Unknown <br> Neha has 24 books about rocks. She has <br> 43 fewer rock books than the library. <br> How many books about rocks does the <br> library have? |
| Multiplication <br> Kenzie has 6 boxes of rocks. There are <br> rocks in each box. How many rocks does <br> Kenzie have? | Measurement Division <br> Meleri is sorting her rock collection into <br> boxes. 5 rocks can fit in one box. How <br> many boxes will Meleri need for 52 rocks <br> if she wants to put all of her rocks into <br> boxes and the boxes are as full as <br> possible? | Partitive Division <br> Mark had 60 fossils. He put them into 10 <br> boxes so there were the same number of <br> fossils in each box. How many fossils did <br> Mark put in each box? |

## Cognitively Guided Instruction Story Problems

Based on The Lion, The Witch and The Wardrobe by C.S. Lewis, written by Linda Levi for use with fourth and fifth graders

| Join, Result Unknown <br> To lure Edmund to her side, the White Witch gave him 18 ounces of Turkish Delight. When Edmund returned to Narnia, she gave him another 29 ounces of Turkish Delight. How many ounces of Turkish Delight did the White Witch give Edmund? | Join, Change Unknown <br> Lucy, Peter and Susan have already traveled $673 / 4$ miles. To get to the stone table, they will need to travel a total of $1101 / 2$ miles. How many more miles do they still need to travel to get to the stone table? | Join, Start Unknown <br> At the beginning of the battle, Peter's army had many creatures. During the battle, Aslan brought 2,994 creatures that joined Peter's army. Once these creatures joined the army, there were 3,567 creatures in Peter's army. How many creatures were in Peter's army before Aslan and the other creatures arrived? |
| :---: | :---: | :---: |
| Separate, Result Unknown <br> When Aslan arrived at the White Witch's castle he found 3,249 creatures that had been turned to stone. He brought 2,994 creatures back to life. How many creatures are still in stone? | Separate, Change Unknown <br> Lucy had 5.2 grams of cordial in her bottle. She gave Edmund some of the cordial after he had been wounded in battle. She then had 4.27 grams of cordial in her bottle. How much cordial did she give Edmund? | Separate, Start Unknown <br> Susan had a quiver full of arrows at the beginning of the battle. She shot 328 arrows during the battle. She had 50 arrows left at the end of the battle. How many arrows were in her quiver at the beginning of the battle? |
| Part-Part-Whole, Whole Unknown <br> 3,205 mice were helping to untie Aslan's front helping to untie Aslan's back paws. How many untie Aslan's paws? | ws. 2,995 mice were Part-Part-Whole, Par <br> There were 195 creatur <br> wolf. 99 of them were <br> many Dryads were aro | Unknown <br> s around Lucy when she was attacked by the Naiads and the rest of them were Dryads. How nd Lucy when she was attacked by the wolf? |
| Compare, Different Unknown <br> Before the White Witch cast a spell on Narnia, the average temperature was 68 degrees. Now the average temperature is -15 degrees. How much colder has the average temperature gotten since the White Witch cast her spell? | Compare, Compare Quantity Unknown 257 Centaurs fought in the battle against the White Witch. 34 more Eagles than Centaurs fought in the battle. How many Eagles fought in the battle? | Compare, Referent Unknown <br> Peter has 3.4 grams of rubies in his crown. <br> Peter's crown has .5 grams of rubies more than Edmund's crown. How many grams of rubies are in Edmund's crown? |
| Multiplication <br> Each of the children's crowns contained $42^{3} / 8$ grams of gold. How much gold all together was used to make the four crowns? | Measurement Division <br> During the White Witch's rule, the depth of the snow covering Narnia increased by 3 inches each month. At the end of her rule, the depth of the snow had increased by 87.4 inches. How many months did the White Witch rule Narnia? | Partitive Division <br> Mrs. Beaver packed 187 pounds of provisions when she, Mr. Beaver and the three children escaped from the Beaver's home. She divided the provisions so that each person and animal carried the same amount of weight. How many pounds did each person or animal carry? |

