CGI Problem Type Resource

**Standards addressed by these problems: 1.OA.1, 1.OA.3, 1.OA.5, 1.OA.6, 1.OA.8 \*, 1.NBT.3\*\***

*\*Teacher note, to address the standard 1.OA.8, one possible activity is to FIRST have the students solve the below story problems using a strategy that makes sense to them. After the students have independently solved the story problem you can add to your discussion, “I know many of you solved this story in different ways. Some of you added and some of you subtracted. However, a good mathematician is flexible and can think about it in more than one way. Let’s also think about the number sentence (and/or equation) that goes with the story problem.” Then at that time also write the number sentence that goes with the story problem by indicating the unknown value using a box .*

Overall purpose of these problem types: Students will use their **understanding of operations (inverse operation) and algebraic reasoning (commutative property, associative property) to solve addition/subtraction problems within 20**. Possible problems that can be used to address are JRU, JCU, JSU, SRU, SCU, SSU, PPW-WU, PPW-PU, CDU, CCQU, and CRU.

*(NOTE: Any of these problems can be used as a pre/post test or ongoing assessment of students’ understanding.)*

**JRU (Join-Result Unknown):**

Jennifer has \_\_\_\_ cookies. Her mom gives her \_\_\_\_ more cookies. How many cookies does she have altogether?

(7, 3) (7, 4) (7, 5)

**JCU (Join-Change Unknown):**

Joy has \_\_\_\_ stuffed animals. Her best friend gave her some more. Now, Joy has \_\_\_\_ stuffed animals. How many stuffed animals did her best friend give her?

(5, 10) (5, 11) (5, 12)

**JSU (Join-Start Unknown):**

In the morning, Paul fed his dog some dog treats. In the afternoon, he fed his dog \_\_\_\_ more dog treats. The dog ate \_\_\_\_ dog treats in all. How many dog treats did Paul feed his dog in the morning?

(4, 8) (6, 12) (7, 14)

**SRU (Separate-Result Unknown)**

Ayden had \_\_\_\_ rocks in his pocket. \_\_\_\_\_ rocks fell out. How many rocks are left in Ayden’s pocket?

(10, 5) (10, 4) (10, 6)

**SCU (Separate-Change Unknown)**

\_\_\_\_\_ kids were playing soccer outside at recess. Some kids went inside to get a drink of water. Now, \_\_\_\_ kids are still playing soccer. How many kids went inside to get a drink of water?

(16, 8) (15, 8) (15, 7)

**SSU (Separate-Start Unknown)**

Some kids were playing hide and seek afterschool. \_\_\_\_ kids went home to eat dinner. Now, there are \_\_\_\_ kids still playing hide and seek. How many kids were there in the beginning playing hide and seek?

(10, 10) (15, 5) (11, 5)

**PPW-WU (Part-Part-Whole, Whole Unknown)**

Emilio has \_\_\_\_\_ cats and \_\_\_\_\_ dogs at his house. How many pets does he have altogether?

(8, 2) (8, 3) (8, 4)

**PPW-PU (Part-Part-Whole, Part Unknown)**

Mrs. Yates has \_\_\_\_\_ kids in her kindergarten classroom. \_\_\_\_ of the kids are boys and the rest are girls. How many girls are in Mrs. Yates kindergarten classroom?

(14, 7) (16, 8) (18, 9)

**\*\*CDU (Compare- Difference Unknown)**

Susan has \_\_\_\_ dollars. Kendra has \_\_\_\_ dollars. How many more dollars does Susan have than Kendra?

(8, 5) (13, 5) (19, 9)

**\*\*CCQU (Compare- Compare Quantity Unknown)**

Susan has \_\_\_\_ dollars. Kendra has \_\_\_\_\_ more than Susan. How many more dollars does Kendra have?

(10, 2) (11, 8) (9, 8)

**\*\*CRU (Compare- Referent Unknown)**

Kendra has \_\_\_ dollars. She has \_\_\_\_ more dollars than Susan. How many dollars does Susan have?

(10, 5) (18, 10) (19, 9)