CGI Problem Type Resource

**Standards addressed by these problems: K.CC.6, K.CC.7, K.CC.2, K.CC.3, K.CC.4, K.CC.5**

Overall purpose of these problem types: Students will use their **understanding of counting and cardinality, operations, and algebraic reasoning (commutative property, associative property) to solve comparison problem types with numbers within 10.** Possible problems that can be used to address are CDU, CCQU, and CRU.

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

**CDU (Compare-Different Unknown):**

Matthew’s mom ordered 4 pepperoni pizzas and 2 cheese pizzas last night. How many more pepperoni pizzas were ordered than cheese pizzas?

Jasmine had 10 stickers in her sticker collection and Anna had 5 stickers in her sticker collection. How many more stickers did Jasmine have than Anna?

**CQU (Compare- Compare Quantity Unknown)**

There were 3 boys swinging on the swings at recess. There were 2 more girls than boys swinging. How many girls were swinging on the swings at recess?

Eduardo has 6 marbles in his marble collection. Jessie has 1 more marble than Eduardo. How many marbles does Jessie have?

**CRU (Compare- Referent Unknown)**

Jessie has 8 books about dinosaurs. He has 4 fewer books about soccer. How many soccer books does Jessie have?

There are 9 students who will eat a tray lunch at school. There are 2 less students eating a sack lunch. How many students are eating a sack lunch?

Carpenter, T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S.B., (1999). *Children’s Mathematics: Cognitively Guided Instruction.* Portsmouth*,* NH: Heinemann.