

CGI Addition & Subtraction Problem Types

*adapted from *Children's Mathematics Cognitively Guided Instruction* by Carpenter, Fennema, Franke, Levi, Empson

	Result Unknown	Change Unknown	Start Unknown
Join	Sarah had 6 crayons. Brad gave her 7 more crayons. How many crayons does Sarah have altogether?	Sarah has 6 crayons. How many more crayons does she need to have 13 altogether?	Sarah had some crayons. Brad gave her 7 more crayons. Now she has 13 crayons. How many crayons did Sarah have to start with?
Separate	Sarah had 13 crayons. She gave 6 to Brad. How many crayons does Sarah have left?	Sarah had 13 crayons. She gave some to Brad. Now she has 7 marbles left. How many marbles did she give to Brad?	Sarah had some crayons. She gave 6 to Brad. Now she has 7 crayons left. How many crayons did Sarah have to start with?

	Whole Unknown		Part Unknown
Part-Part-Whole	Sarah has 6 green crayons and 7 purple crayons. How many crayons does she have?		Sarah has 13 crayons. 6 are green and the rest are purple. How many purple crayons does Sarah have?

	Difference Unknown	Compare Quantity Unknown	Referent Unknown
Compare	Sarah has 13 crayons. Brad has 7 crayons. How many more crayons does Sarah have than Brad?	Brad has 7 crayons. Sarah has 6 more than Brad. How many crayons does Sarah have?	Sarah has 13 crayons. She has 6 more crayons than Brad. How many crayons does Brad have?