

Addition word problems, the basic types

1. How are these word problems different from a child's perspective? Which is easier for a young child to understand?

a. Paula had 4 marbles. When she cleaned her room, she found 5 more marbles. How many marbles does she have now?	b. There are 4 sweet crackers in the lunch box, and 5 salty crackers in the lunch box. How many crackers are in the lunch box?
--	--

Describe how to solve problems of each of these types by direct modeling:

Sample problems:

2. Explain how to model a ARU problem such as: Ethan had 3 robots. For his birthday, he got 5 more robots. How many robots does he have now?

3. Explain the difference in the associated strategies for direct modeling TRU, ACU and CDU problems. For example, explain how to solve each by direct modeling:

a. TRU (separating from): Nathan had 5 balloons. 2 of his balloons popped. How many balloons did he have left?

b. ACU (joining to): Ralph made 2 paper airplanes. How many more does he have to make to have 5 paper airplanes?

c. CDU (matching): John had 2 video games. Henry had 5 video games. How many more video games did Henry have than John?

Describe how to solve problems of each of these types by using the associated counting strategy:

4. Describe how to solve this ARU problem by counting on: Ethan had 3 robots. For his birthday, he got 5 more robots. How many robots does he have now?

5. Describe how to solve this ACU problem by counting on to: Ralph made 2 paper airplanes. How many more does he have to make to have 5 paper airplanes?

6. Describe how to solve this TRU problem by counting back: Nathan had 5 balloons. 2 of his balloons popped. How many balloons did he have left?

Draw a labelled bar diagram for a word problem of any of the CGI types, and write the associated addition and subtraction number sentence(s)

Sample problems: draw labelled bar diagrams for each problem.

7. Michelle had 6 marbles. When she cleaned her room, she found some more marbles, and then she had 9 marbles. How many marbles did she find?	8. Nora has 13 markers. Ethan has 8 fewer markers than Nora. How many markers does Ethan have?
9. Paula had 4 marbles. When she cleaned her room, she found 5 more marbles. How many marbles does she have now?	10. Sandy has 2 red hats. She has 2 fewer red hats than blue hats. How many blue hats does she have?
11. Ellen had 11 butterfly stickers. She gave some butterfly stickers to Lisa. Now she has 8 butterfly stickers left. How many butterfly stickers did she give to Lisa?	12. There are 5 sweet crackers in the lunch box, and 10 salty crackers in the lunch box. How many crackers are in the lunch box?

13. Yesterday Zach built some block towers. Today, he built 3 more block towers. In all, he built 11 block towers. How many block towers did he build yesterday?	14. Zach had some dinosaurs. He gave 2 dinosaurs to Seth. Now he has 4 left. How many dinosaurs did Zach have to begin with?
15. Todd has 5 stuffed toy animals and 9 hard plastic toy animals. How many more hard plastic toy animals than stuffed toy animals does Todd have?	16. Zach has 6 GI Joes. He has 2 more GI Joes than Sam. How many GI Joes does Sam have?
17. There are 19 bouncy balls in the toy box. 10 of the bouncy balls are green and the rest are blue. How many of the bouncy balls are blue?	18. David caught 1 fish. How many more does he have to catch to have 3 fish?