Tell what CGI type a particular problem is
Sample problem: Tell what CGI type each of these problems is:

| 1. Michelle had 6 marbles. When she cleaned <br> her room, she found some more marbles, and <br> then she had 9 marbles. How many marbles <br> did she find? JCU | 2. Nora has 13 markers. Ethan has 8 fewer <br> markers than Nora. How many markers does <br> Ethan have? CQU |
| :--- | :--- |
| 4. Sandy has 2 red hats. She has 2 fewer red <br> hats than blue hats. How many blue hats does <br> she have? CRU | 6. There are 5 sweet crackers in the lunch <br> box, and 10 salty crackers in the lunch box. <br> How many crackers are in the lunch box? <br> PPW-WU |
| 9. Todd has 5 stuffed toy animals and 9 hard <br> plastic toy animals. How many more hard <br> plastic toy animals than stuffed toy animals <br> does Todd have? CDU | 10. Zach has 6 GI Joes. He has 2 more GI <br> Toes than Sam. How many GI Joes does Sam <br> have? CRU |

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

Sample problems: (20b) JCU (joining to): Ralph made 2 paper airplanes. How many more does he have to make to have 5 paper airplanes?

- count out 2 counters
- count out more counters (in a new pile), until you have 5 in all
- count the new counters you put out to get the answer


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

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

- Start with 2
- Using your fingers to keep track, count on until you get to 5
- The number of fingers you have up is the answer

Draw a labelled bar diagram for a word problem of any of the CGI types, and write the associated addition and subtraction number sentences) (note: a missing whole problem will typically have only one number sentence (addition), but a missing part problem should have two associated equations: a subtraction equation and a missing number addition equation).

Sample problems: draw labelled bar diagrams for each problem, and write the associated equation (if missing whole) or equations (if missing part).
27. Sandy has 2 red hats. She has 2 fewer red hats than blue hats. How many blue hats does she have?

28. Ellen had 11 butterfly stickers. She gave some butterfly stickers to Lisa. Now she has 8 butterfly stickers left. How many butterfly

31. Zach had some dinosaurs. He gave 2 dinosaurs to Seth. Now he has 4 left. How many dinosaurs did Zach have to begin with?

32. Todd has 5 stuffed toy animals and 9 hard plastic toy animals. How many more hard plastic toy animals than stuffed toy animals


For any subtraction problem, make a bar diagram, and write the associated missing number addition problem. Some more bar diagram examples
Sample problem: 36. Draw a bar diagram and write the associated equations for 13-8=?


$$
\begin{aligned}
& 13-8=? \\
& 8+?=13
\end{aligned}
$$

