

Domain: Operations and Algebraic Thinking	Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	
K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. *		
* See Glossary, Table 1 of Common Core State Standards for Mathematics for clarification of various types of problems.		
Notes to Teacher:		
In addition to finding the result for the four types of problems mentioned in the standard, kindergarten students must also learn to find missing addends for putting together and taking apart situations. It is interesting to note that in the Table mentioned above, Common Core State Standards uses one set of problems to illustrate put together/take apart situations. From the very beginning, students need to recognize that in such situations it is equally appropriate to use subtraction or to find the missing addend to solve these problems. Teachers should be flexible in demonstrations and think-alouds and should call on students using each approach to share their thinking. Developing this concept from the onset solidifies students’ understanding of the relationship between addition and subtraction and will be a powerful tool for future work in algebra.		
Task	Explanation/Comments	Sample Student Work
Alistair has 3 toy cars. His friend Hayden bings 5 toy cars when he comes to play with Alistair. How many cars do the boys have to play with now?  Draw or explain.	Example of <i>putting together</i> Total unknown	Student:  “They have 8 toy cars because they put them all together. I used 3 red cubes for Alistair’s cars and 5 blue cubes for Hayden’s cars. I counted and it was 8.”
Brent had 4 books about dinosaurs. He got 2 more books about dinosaurs from the library. How many dinosaur books does Brent have now?  Draw or explain.	Example of <i>adding to</i>	Student:  “He has 6 books because he had 4 and then he got 2 more. I got 4 beans and then I got 2 more. Then, I counted all of them and it was 6.”

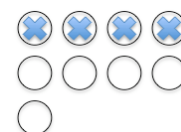
Emerald had 9 stuffed animals. She put 4 of them in the chair for the tea party. She left the rest of them on the bed. How many stuffed animals did Emerald leave on the bed?

Draw or explain.

Example of *taking apart*  
Addend unknown

Student:

"I drew 9 circles for all the stuffed animals. Then I crossed out the ones that Emerald put in the chair. Then these 5 were on the bed."



Max had 7 pencils in his box. He gave 2 of them to Lyle. How many pencils does Max have in his box now?

Draw or explain.

Example of *taking from*

Student:

"I put  $7 - 2$  because I knew that he was taking away some pencils. Then, I drew 7 pencils and erased 2 of them and that was 5 pencils left."

