Task 4: Posing Problems to Elicit Specific Strategies

Name:⎽⎽

As a teacher you will often need to create problems for your students with a particular goal in mind. Your goal here is to create four fraction comparison problems for a child (or classmate) as specified below (all fractions should be provided in simplest form). *Carefully choose your fractions so that no strategy other than the one you are targeting will be especially easy or obvious.* For each problem, use the recording chart below to specify the strategy that you are targeting, solve the problem using the targeted strategy, and explain/justify why you chose the fractions you did.

Transfer the problems you created to the student sheet and ask a child (or classmate) to solve your problems. Afterwards, complete the remainder of the recording chart by identifying the strategy used by the solver. If your intended strategy was not the one used, modify your original problem in a way that might help discourage solvers from using other, unintended strategies. Briefly explain your modifications.

Recording Chart					
	PRIOR to having a child (classmate) solve your problems			AFTER a child (classmate) has solved your problems	
	Fractions to compare	Solution using your targeted strategy	Explanation/justification for the fractions you selected	Strategy used by the solver	Modified problem and explanation
1. Design a problem that can be solved using the *benchmark value between* strategy, with a benchmark other than ½ or 1. *Targeted benchmark value*:					

Task 4: Posing Problems to Elicit Specific Strategies

Name:_____

	PRIOR to having a child (classmate) solve your problems			AFTER a child (classmate) has solved your problems	
	Fractions to compare	Solution using your targeted strategy	Explanation/justification for the fractions you selected	Strategy used by the solver	Modified problem and explanation
2. Design a problem that requires using the *benchmark value distance* strategy. *Targeted benchmark value*:					
3. Design a problem that can be solved using the *greater number of larger pieces* strategy.					

Task 4: Posing Problems to Elicit Specific Strategies

Name:

	PRIOR to having a child (classmate) solve your problems			AFTER a child (classmate) has solved your problems	
	Fractions to compare	Solution using your targeted strategy	Explanation/justification for the fractions you selected	Strategy used by the solver	Modified problem and explanation
4. Design a problem that requires using *any* strategy of your choice (*except same size of pieces*). *Targeted strategy*:					

Name:

For each pair of fractions below, circle the fraction that is *greater* (or if the fractions are equivalent, write "=" in between them). Explain how you know.

Fractions to compare	Explanation
1.	
2.	
3.	
4.	