FOR GROWN-UPS

Answer Key

The whole packet trains ONE habit: read the story, ask 'which number is the WHOLE and which are the PARTS?', draw the bar, THEN pick + or −. The bar decides the operation, not a keyword. If she reaches for a keyword ('more' = add), stop and act it out with objects (page 2). Accept any correct equation (5 + 4 = 9 or 4 + 5 = 9) and any answer sentence that names the thing ('9 birds'). For take-from, the STARTING number is the whole and goes on the long bar.

2 · Act It Out

- Ex 1 (add-to): Ben ENDS UP with more, so the counters JOIN. Draw 5 then 4 more = 9 marbles. (This is a getting-MORE story.)
- Ex 2 (take-from): birds FLY AWAY, so counters LEAVE. Cross off 3 of the 7 -> 4 birds left. (This is a going-AWAY story.)
- Ex 3 (put-together): red and blue are two PARTS of one pile. Circle all together = 6 crayons. (This is a two-kinds-in-one-pile story.)
- Ex 4: a=JOIN (getting more) · b=TAKE AWAY (going away) · c=PUT TOGETHER (two kinds). She reads the ACTION, not a word.

3 · The Part-Whole Bar

- Ex 1: the two parts are 5 and 4; the WHOLE (the ?) is on the long bar underneath. 5 and 4 make 9. Ben has 9 marbles.
- Ex 2a (add-to): parts 6 and 3, whole = ? -> 9. Draw parts 6 and 3, ? under the whole. 9 stickers.
- Ex 2b (put-together): parts 4 (red) and 8 (blue), whole = ? -> 12 crayons.
- Ex 3: she draws her own bar: two parts 7 and 5, ? on the whole; 7 and 5 make 12. 12 books. Accept parts in either order (7,5 or 5,7).

4 · The Take-From Bar

- Ex 1: the WHOLE is 9 (what he started with, on the long over-bar). The crossed-off part is 3 (rolled away). The ? is what's LEFT: 9 − 3 = 6 marbles.
- Ex 2a: whole 8 apples, cross off 3 eaten, 8 − 3 = 5 left.
- Ex 2b: whole 10 cookies, cross off 4 given away, 10 − 4 = 6 left.
- Ex 3: she draws it: long bar = the starting 12; cross off 5; ? = 7 fish left. 12 − 5 = 7.
- Ex 4 (which is the whole?): the STARTING number, 15, is the whole. (Not 6 -- 6 is the part that leaves.) Circle 15.

5 · Bar, Equation, Sentence

- Ex 1: 5 + 4 = 9 (box holds 9). Sentence: 'There are 9 marbles.' Accept 4 + 5 = 9.
- Ex 2a (add-to/put-together, whole missing -> add): 8 + 6 = 14. 'There are 14 shells.'
- Ex 2b (take-from, part missing -> subtract): 13 − 5 = 8. 'There are 8 grapes left.'
- Ex 3: story matches the take-from bar. 11 − 4 = 7. Equation with box: 11 − 4 = [7]. Sentence: 'There are 7 ducks left.'

6 · Don't Fall for Sam's Trick

- Ex 1: Sam is WRONG. 'flew away' is a going-AWAY story, so it's take-from: 9 − 4 = 5 birds. Sam grabbed both numbers and added (9 + 4 = 13). Two numbers does NOT mean add -- read the action. The whole is 9; a PART is missing, so subtract.
- Ex 2 (counter-trap): Sam is RIGHT here. 'found 6 more' is a getting-MORE story -> add: 7 + 6 = 13 shells. Don't cross out a correct one just because he was wrong last time!
- Ex 3: draw the bar to decide. It's take-from (some hop away): whole 12, part 5 leaves, 12 − 5 = 7 frogs. The word 'more' does not appear -- and even if it did, the ACTION rules.

7 · Case Closed at the Market

- Ex 1 (put-together, blank template given): parts 8 apples + 5 pears, whole = ?. 8 + 5 = 13 fruits.
- Ex 2 (take-from, template given): whole 14 balloons, 6 pop, 14 − 6 = 8 balloons left.
- Ex 3 (add-to, NO template -- she draws): 9 + 7 = 16 coins. Accept 7 + 9.
- Ex 4 (take-from, NO template, fully faded): 16 − 9 = 7 tickets left. Equation + sentence her own.