

Using bar models to show addition and subtraction together activities

1 Build with strips — then draw it

Children choose two bar strips and place them side by side to check they fill a whole strip exactly, then draw a bar to match before finding the matching equation card.

"Place your two strips side by side. Do they fill the whole strip exactly?"

"Draw the bar to match, then find the equation card for it."

2 Cover a part on the strips — find the reverse card

Using the same strips, children remove one part and search the cards for the subtraction that matches what is left.

"Take one strip away. What is left?"

"Find the equation card for the subtraction this shows."

3 Build it before you draw it — strips first

Children build the two parts with strips first, checking the fit against the whole, then draw and label a bar to match without the strips in front of them.

"Build your two parts with the strips first. Do they match the whole?"

"Now draw the bar from memory. Does it still match?"

4 Non-example: the picture and the equation do not match

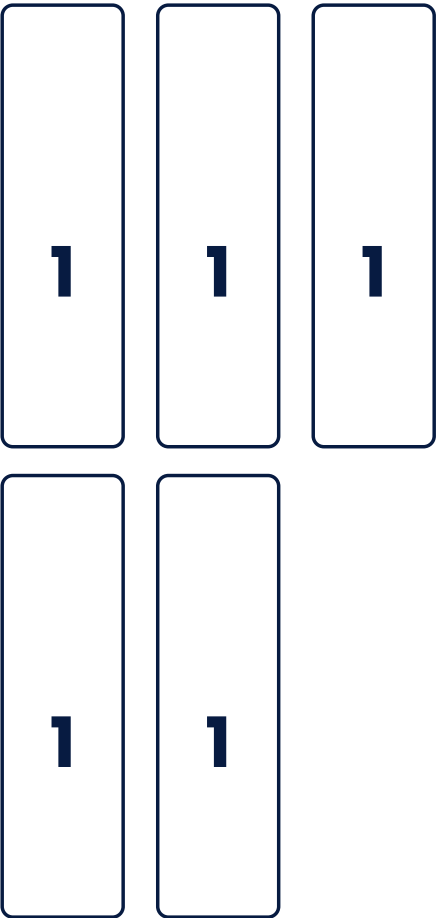
Show a bar model with parts six and three, but pick the equation card six plus four equals ten to go with it.

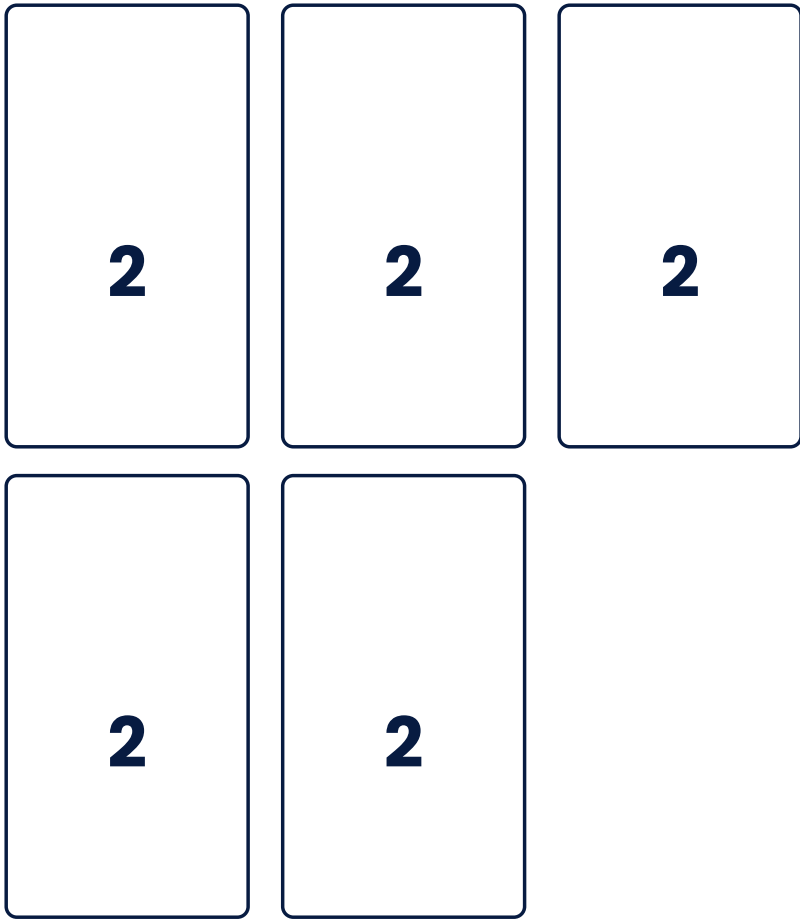
"The bar shows six and three, but this card says six plus four."

"Check with the strips — what does not match?"

Bar pieces

Part pieces





3

3

3

3

3

4

4

4

4

4

5

5

5

5

5

6

6

6

7

7

7

8

8

8

Whole pieces

9

9

10

10

11

11

12

12

13

13

14

14

15

15

Equation cards

$$3 + 2 = 5$$

$$5 - 2 = 3$$

$$1 + 4 = 5$$

$$5 - 4 = 1$$

$$2 + 5 = 7$$

$$7 - 5 = 2$$

$$3 + 4 = 7$$

$$7 - 4 = 3$$

$$6 + 2 = 8$$

$$8 - 2 = 6$$

$$5 + 3 = 8$$

$$8 - 3 = 5$$

Equation cards

$$4 + 5 = 9$$

$$9 - 5 = 4$$

$$6 + 4 = 10$$

$$10 - 4 = 6$$

$$7 + 3 = 10$$

$$10 - 3 = 7$$

$$5 + 6 = 11$$

$$11 - 6 = 5$$

$$8 + 4 = 12$$

$$12 - 4 = 8$$

$$6 + 7 = 13$$

$$13 - 7 = 6$$

Equation cards

$$8 + 5 = 13$$

$$13 - 5 = 8$$

$$7 + 7 = 14$$

$$14 - 7 = 7$$

$$8 + 7 = 15$$

$$15 - 7 = 8$$