

Using collections to show addition and subtraction together activities

1 Build the whole with two colours

Children build a whole from two-colour counters, flipping some to show two parts. They search the shuffled equation cards to find the addition that matches, then find its reverse.

"Flip some counters to make two parts. Search the cards – which addition matches what you built?"

"Now find that equation's reverse in the cards."

2 Move the parts, keep the whole

Without changing the total, children rearrange which counters are flipped, finding a different split of the same whole and searching the cards for its new addition and reverse.

"Flip different counters so the parts change, but the whole stays the same. Search the cards for your new addition."

"Can you also find its reverse in the cards?"

3 Now try it without moving them — draw it on paper

Children build one more example with the counters, draw it on paper exactly as it sits, then check the drawing by finding the same equation card again.

"Build your parts with the counters first, then draw them on paper."

"Find the equation card that matches your drawing. Does it still match, now it can't be moved?"

4 Non-example: a true equation card that does not match

Build four red and two yellow counters, then pick the card $3 + 2 = 5$ to go with it. The equation is true, but it is not the one these counters show.

"This card is true — three plus two is five. Does it match the counters you built?"

"Search the cards again. Which one actually matches?"

Equation cards

$$6 - 2 = 4$$

$$8 - 4 = 4$$

$$5 + 4 = 9$$

$$3 - 2 = 1$$

$$5 + 5 = 10$$

$$2 + 3 = 5$$

$$1 + 1 = 2$$

$$6 - 3 = 3$$

Equation cards

$$2 + 2 = 4$$

$$5 - 2 = 3$$

$$2 - 1 = 1$$

$$1 + 2 = 3$$

$$4 + 2 = 6$$

$$5 - 3 = 2$$

$$3 + 3 = 6$$

$$7 - 3 = 4$$

Equation cards

$$4 - 2 = 2$$

$$3 + 2 = 5$$

$$4 + 4 = 8$$

$$5 + 2 = 7$$

$$9 - 4 = 5$$

$$10 - 5 = 5$$

$$7 - 2 = 5$$

$$4 + 3 = 7$$