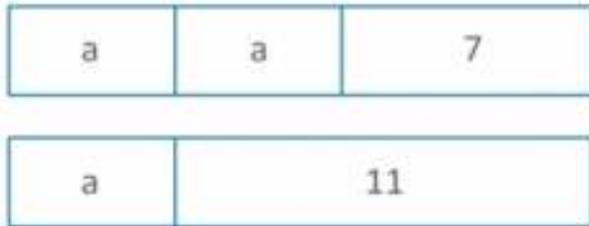


Algebra

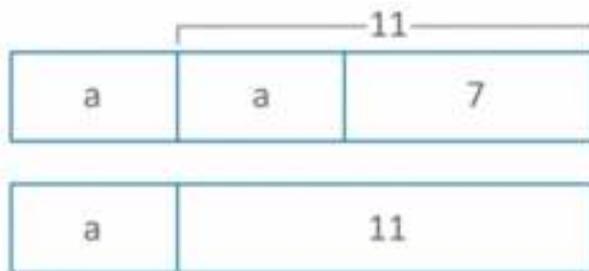
Year 6

$$2a + 7 = a + 11$$

Use comparative model, as both sides of the equation will equal the same total:



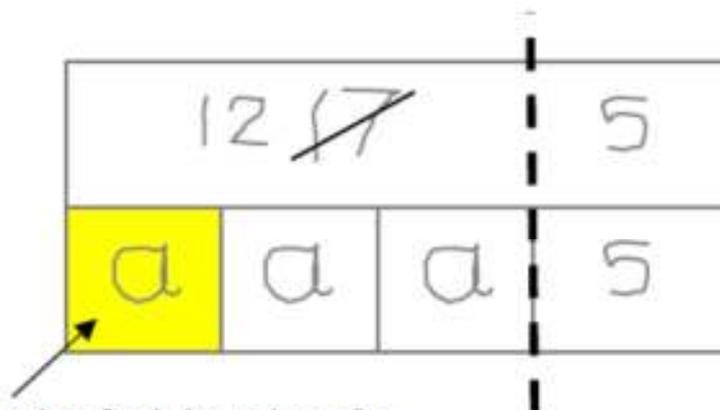
The bars showing 7 and 11 could have been a lot smaller or larger as we don't know their relative value to 'a' at this stage. However, it is crucial that the 'a' appearing first in both bars is understood to be equal (even if it is only approximately equal when drawn freehand in the bar). This allows the pupil to 'see' that to work out the second



So that 'a' must be 4 as $7+4=11$. Each 'a' has the same value so the other 'a's will also be 4. Each side of the equation will total 15.

$$3a + 5 = 17$$

What is the value of a?



Division can then be used to find the value of a

