

Use place value understanding and properties of operations to add and subtract (Standards 4–6).

**Standard 1.NBT.6** Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

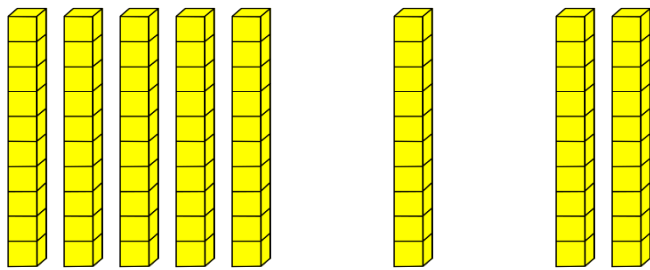
**Key Elements:**

Students need practice with manipulatives before they create models (pictures) to represent their thinking.

Students will solve subtraction problems with multiples of ten by using models (manipulatives), drawings, and strategies.

**Models**

**Base Ten Blocks:** Use Base Ten blocks to model subtraction with decade numbers. For example:  $80 - 20 = ?$  Students place 8 ten sticks on their desk. They take away 2 of the tens sticks and find that they have 6 ten sticks left. Count the tens sticks by 10s.

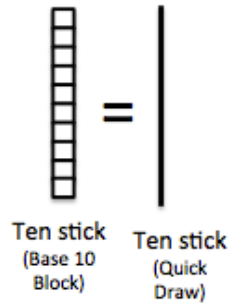


count: “10”    “20”    “30”    “40”    “50”    “60”

Could also model using: mini ten frames, bean cups

**Drawings**

**Tens sticks and ones drawings:** After practice with the base ten blocks, students begin to draw pictures of the base ten blocks using sticks for 10s and circles for 1s. To represent a ten

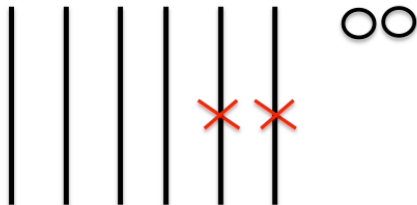


stick in base ten, use a straight line (see picture).

Example 1:  $80 - 20 = ?$  would be drawn as:



Example 2:  $62 - 20 = ?$  would be drawn as:



### Strategies

**Related Facts:** Students can use known facts to solve subtraction problems using decade numbers. For example, if a student knows that  $8 - 2 = 6$ , then the student may know that  $80 - 20 = 60$ .

**Fingers:** Students may use their fingers as '10 sticks' and hold up 8 fingers, put down 2 fingers and see that 6 fingers are left, then they convert those fingers into tens for an answer of 60.