

They use place value understanding and properties of operations to add and subtract (Standards 2.NBT.5–9).

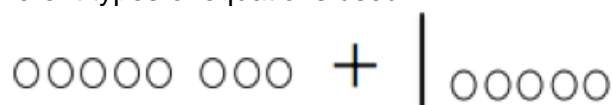
Standard 2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.

Key Elements: use pictures, equations, and words to show how and why different strategies work when adding and subtracting.

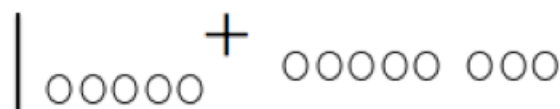
Students need to explain what they did to solve a problem, give examples, and show how can they solve in a different way. Students can use words, pictures, and or equations to explain their reasoning.

There are four possible equations to a given problem, which was formerly known as fact families. Now they are just referred to as the different types of equations used.

$$8 + 15 = 23$$



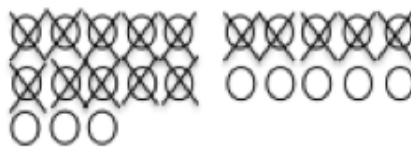
$$15 + 8 = 23$$



$$23 - 8 = 15$$



$$23 - 15 = 8$$



Relating subtraction to addition: It is important for students to see the difference between the different models i.e. how does the picture method in addition and subtraction compare. Have students look and discuss similarities and differences of each method.

