adding and subtracting

Objectives:

- Students will fluently add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Students will mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.
- Students are able to explain why addition and subtraction strategies work, using place value and the properties of operations.

Standard Method

$$
\begin{array}{r}
1\ 1 \\
353 \\
+\ 289 \\
\hline
642
\end{array}
$$

1. Add 3 + 9 = 12.
2. Write the 2 below the 9; carry the 1 above the 5.
3. Add 1 + 5 + 8 = 14. Write the 4 below the 8; carry the 1.
4. Add 1 + 3 + 2 = 6. Write the 6 below the 2.
5. Answer: 642.

Grouping Method

$$
\begin{array}{r}
353 \\
+\ 289 \\
\hline
642
\end{array}
$$

Think about 353 as 300 + 50 + 3 and 289 as 200 + 80 + 9.

Add 300 + 200
Add 50 + 80
Add 3 + 9

Answer: 500 + 130 + 12 = 642

Starting numbers: 353 + 289

Group together hundreds, tens, and ones.

Ten 1s = 1 ten

Ten 10s = 1 hundred

Final Answer
6 hundreds = 600
4 tens = 40
2 ones = 2
= 642