## GUESS AND CHECK



This strategy encourages students to make a reasonable guess, check the guess, and revise the guess if necessary. By repeating this process, a student can arrive at a correct answer that has been checked. Using this strategy does not always yield a correct solution immediately, but it provides information that can be used to better understand the problem and may suggest the use of another strategy.

Example 1: I wrote 3 different numbers on 3 cards. The sum of the numbers is 7 . What did I put on the cards?

Try $1+2+3=6$ (it's too low)
Try 1+2+4 = 7 (it's correct)
I put 1, 2, and 4.
Example 2: Matt bought 2 items. He paid with his $\$ 5$ bill and get $\$ 2.25$ change. What two items did he buy?

| Items |  |
| :--- | :--- |
| Hotdog | $\$ 1.50$ |
| Cheese burger | $\$ 2.00$ |
| Popcorn | $\$ 0.75$ |
| Soda | $\$ 0.50$ |

Matt spent $\$ 2.75$---- $\$ 5$ subtracts $\$ 2.25$.
Try a hotdog and a burger $\rightarrow \$ 3.50$ (too high).
Try a hotdog and popcorn $\rightarrow \$ 2.25$ (it's too low).
Try a burger and popcorn, $\$ 2+\$ 0.75$ = $\$ 2.75$ (it's correct).

## Example 3:

Tom played darts and the target had 3 sections: 30 points, 14 points, and 8 points. He took 5 tries, but missed the target twice. His score was 46 . What sections did he hit?

Try 30+14+8 = 52 (it's too high).
Try 30+8+8=46 (it's correct). He hit 30, 8 and 8 .

