## More Bowling with Jacob

Name: $\qquad$ Date: $\qquad$ Hour: $\qquad$

Jacob decided to bowl with various weights of bowling balls and see how many pins he knocked down. He decided to try the $8 \mathrm{lb} ., 10 \mathrm{lb}$. , and 14 lb . bowling balls. He made 5 attempts to knock down 10 standing pins with each weight. He then took the average number of pins for each weight.

| Weight of <br> bowling ball | Pins knocked <br> down (average) |
| :---: | :---: |
| 8 lbs. | 6.4 |
| 10 lbs. | 4.8 |
| 14 lbs. | 3.8 |



Place an $\mathbf{X}$ by each true statement below based on Jacob's data and scatter plot provided below.
__ A If Jacob knocks down 5 pins when he uses the 12 lb . ball, it will be more than expected.
B If Jacob knocks down 4 pins when he uses the 12 lb . ball, it will be more than expected.
C If Jacob uses a 16 lb . ball, he can expect to knock down fewer than 3.7 pins on average.
D Jacob's accuracy is improving as the ball's weight increases.
E Jacob can knock down more than $60 \%$ of the pins with the 8 lb . ball.

Explain your thinking. Describe what Jacob's data table and graph show.

