## Quiz 1A (Blue): Motion

Throw ball upward from point A . When the ball is on its way down, catch it at point $B$ which is higher than $A$. Plot position vs time. (3 pts)


A person initially at point $P$ in the illustration stays there a moment and then moves along the axis to $Q$ and stays there a moment. She then runs quickly to $R$, stays there a moment, and then strolls slowly back to $P$. Which of the position vs. time graphs below correctly represents this motion?

$$
\underset{ }{ } \begin{array}{cccccc}
Q & R & P & \\
\hline 0 & 1 & 2 & 3 & 4
\end{array} \underset{\text { (arbitrary units) }}{\text { position }}
$$



A roof tile falls straight down from a two-storey building. It lands in a swimming pool and settles gently at constant speed to the bottom. Draw a complete motion diagram of the tile. Be sure to show the acceleration at the lowest point!

- Point of release

