Name: $\qquad$
$\qquad$

## Vertical Projectiles

A ball is tossed vertically upward. Its initial velocity is $39.2 \mathrm{~m} / \mathrm{s}$ upward. The diagram shows the path of the ball and its velocity at different times. A summary of the ball's motion is given at the bottom of the page.


## Velocity

- highest at the bottom of the ball's path
- steadily decreases to zero as ball rises in the air
- steadily increases from zero as ball falls toward ground


## Acceleration

- always $9.8 \mathrm{~m} / \mathrm{s}^{2}$ downward


