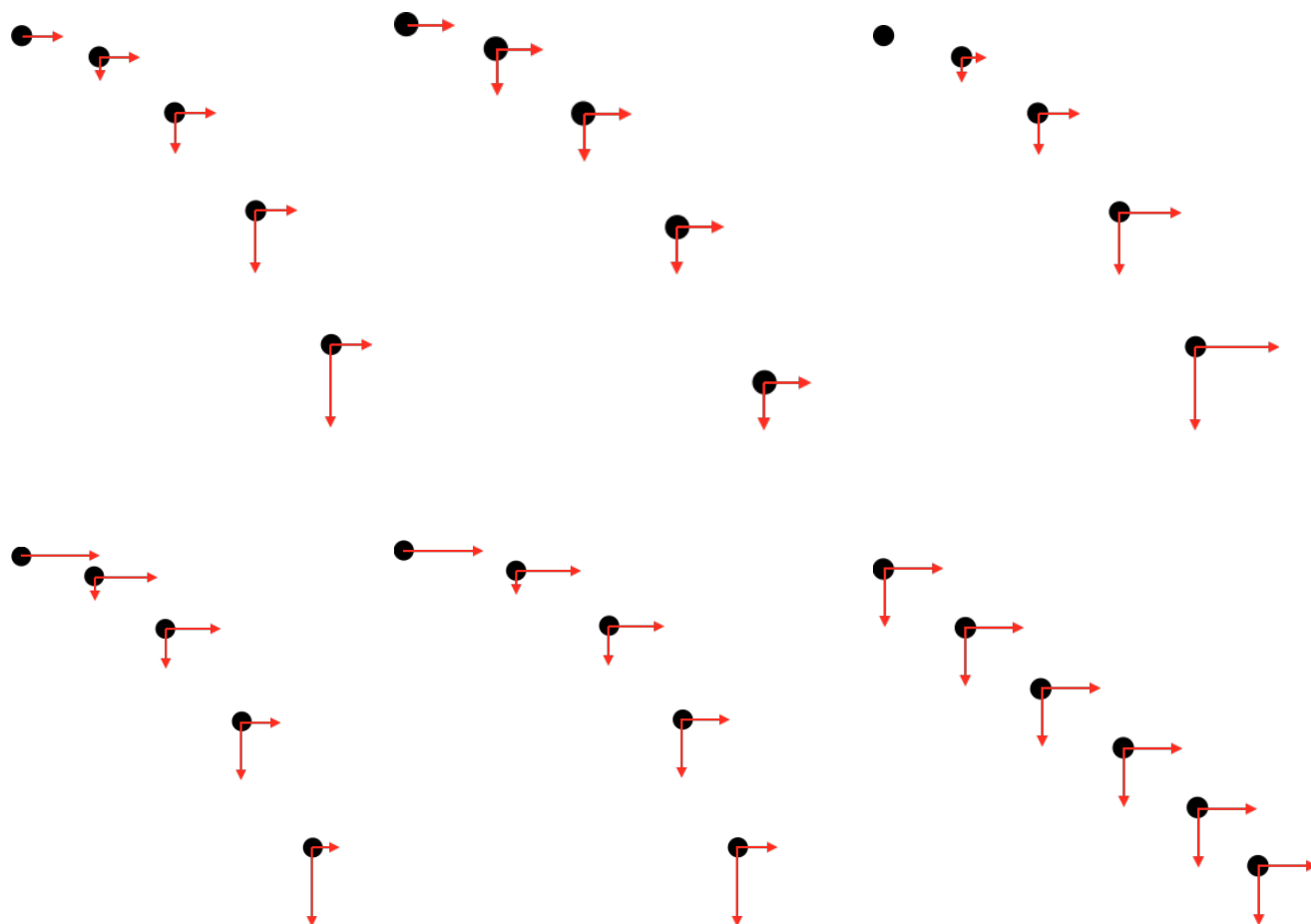
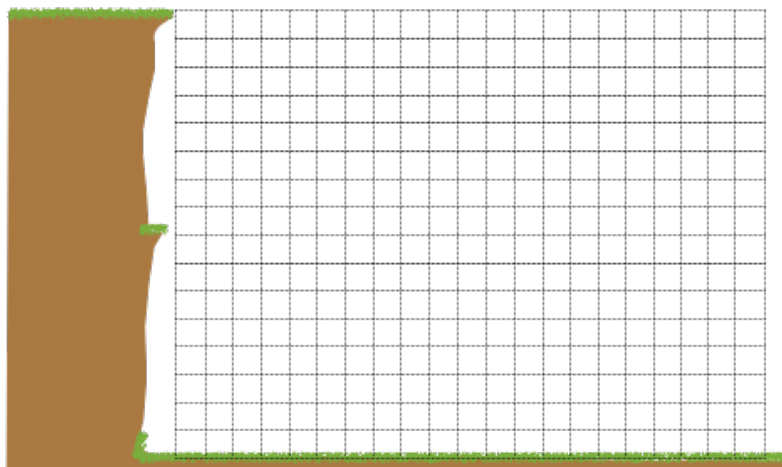
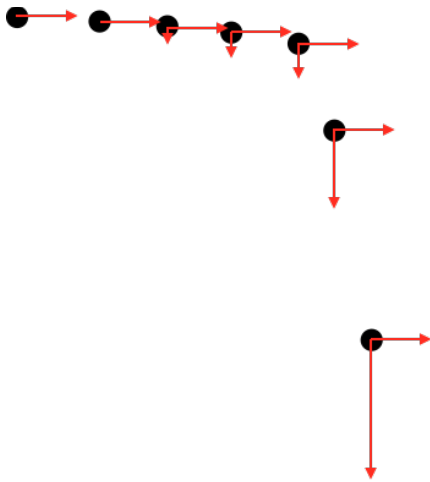


## Trajectory: Horizontally Launched Projectiles

There are five questions in this Concept Builder. They differ only in terms of the initial launch velocity. The velocity values are 12.0 m/s, 14.0 m/s, 15.0 m/s, 16.0 m/s, and 18.0 m/s.

A projectile is launched horizontally from a cliff top. Select the corresponding motion diagram.

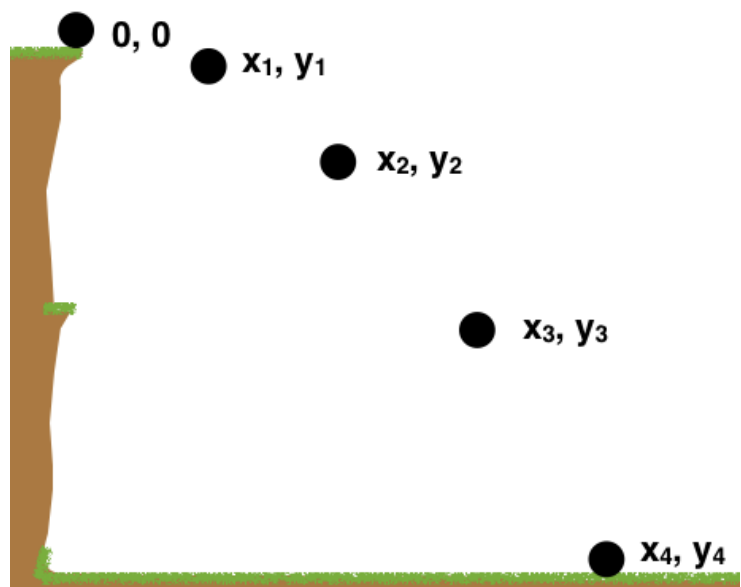




A projectile is launched horizontally from a cliff top at 12.0 m/s. Determine the values of the velocity components at 1-second intervals of time.

time (s)	$v_x$ (m/s)	$v_y$ (m/s)
0.0		
1.0	A:	B:
2.0	C:	D:
3.0	E:	F:
4.0	G:	H:

A projectile is launched horizontally from a cliff top at 12.0 m/s. Determine the x-y positions at 1-second intervals. The launch position is (0 m, 0 m).



<b>time (s)</b>	<b>x-Position (m)</b>	<b>y-Position (m)</b>
0.0		
1.0	<b>x<sub>1</sub>:</b>	<b>y<sub>1</sub>:</b>
2.0	<b>x<sub>2</sub>:</b>	<b>y<sub>2</sub>:</b>
3.0	<b>x<sub>3</sub>:</b>	<b>y<sub>3</sub>:</b>
4.0	<b>x<sub>4</sub>:</b>	<b>y<sub>4</sub>:</b>