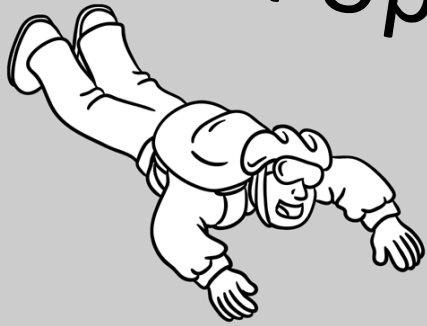# Warm Up

Tiffany learned that the acceleration of a free-falling body is 9.8 m/s². She wanted to find out what speed a sky diver reaches after several seconds. Her calculations are shown in the table.

1. According to the data, about how fast will the speed of a falling sky diver be after 5 seconds?
2. Which of these causes falling sky divers to accelerate? *(inertia, gravity, rotation of Earth on its axis, the tilt of Earth on its axis)*
3. Calculate how far the sky diver has fallen at the 5 second mark.

Time (s)	Speed (m/s)
0	0
1	9.8
2	19.6
3	29.4
4	39.2
5	?