

Sketching Velocity-Time Graphs

Sketch a velocity-time graph for each of the descriptions.

1. A skateboard rolls across the floor, to the right, at a constant velocity.
2. The same skateboard rolls across the floor, to the left, at a constant velocity.
3. A kid on a sled slides down a hill, starting from rest.
4. The kid is moving at 5.0 m/s when he gets to the bottom of the hill where there is a small incline.
5. Some kids are making a cool Hot Wheels track for their Matchbox cars. The cars roll from right to left on a horizontal section, then down a short incline, and onto a second horizontal section.
6. The kids make some changes to the track. Now the cars start from rest at the top of an incline, roll along a short horizontal section and then up a short incline to another horizontal section.
7. You and some friends are cruising around on the weekend (your mom is driving). Your mom brakes for a traffic light, speeds up when the light turns green and then cruises along Hampton Road.