

Name:

Period:

Conceptual Physics: HW: Kinematics II

1. What is the difference between a vector and a scalar?
2. Give one example of a vector and one example of a scalar.
3. You want to drop supplies onto an island from an airplane travelling horizontally above the island. Should you release the supplies before, exactly over, or after the island? Explain.
4. You flip a coin straight up while sitting in a car going 35 m/s. Will the penny land in front of you, behind you, or back in your hand? Explain.
5. You want to shoot a monkey in a tree. At the very moment you fire the gun the sound will scare the monkey and it will let go of the tree, free falling from rest. Should you aim above, below, or directly at the monkey to hit it? Explain.