## Science 1206-Worksheet 7: Velocity

1. Mary runs at a speed of $3.0 \mathrm{~m} / \mathrm{s}[\mathrm{N}]$ for 2.0 minutes. What is her displacement for the trip?
2. A car travelling at an average speed of $57 \mathrm{~km} / \mathrm{h}[\mathrm{E}]$ makes a $300 \mathrm{~km}[\mathrm{E}]$ trip. How long did the trip take?
3. If Tom's velocity is $17 \mathrm{~km} / \mathrm{h}$ east, how long will it take for him to travel 50 km east?
4. A car travels from St. John's to Clarenville in 2.0 hr . The displacement traveled by the car is 175 $\mathrm{km}[\mathrm{W}]$. What is the average velocity of the car for the trip?
5. A person walks at a velocity $6.0 \mathrm{~km} / \mathrm{h}$ [E]. How much time is required for a person to walk 30 $\mathrm{m}[\mathrm{E}]$ ?
6. A car drives $90.0 \mathrm{~m}[\mathrm{~N}]$ in 20.0 s , then turns and drives $225 . \mathrm{m}[\mathrm{S}]$ in 25.0 s . What is the car's speed and velocity?
7. A walker goes 40.0 m [W] in 15.0 s , then turns and walks 40.0 m [E] in 15.0 s , then turns and walks 30.0 m [W] in 10.0 s . What is the person's speed and velocity?
8. A car drives 70.0 m [W] in 20.0 s , then turns and drives $150 . \mathrm{m}[\mathrm{E}]$ in 45.0 s . What is the car's Velocity?
9. A crow flies $125 \mathrm{~m}[\mathrm{~S}], 220 \mathrm{~m}[\mathrm{~N}]$ and finally $360 \mathrm{~m}[\mathrm{~S}]$. If this takes the crow 15 minutes, calculate the crow's average speed and average velocity.
10. The world record for the 400.0 m (1 lap around the track) race is 43.18 s . Calculate the average speed and average velocity for the race.
