Planet Holloway **websheet 2.2**
Physics Chapter 2
You may print this out and write on it or work on your own paper.
Show all work.

1. Jerry dives onto a "slip and slide" at a speed of 7 m/s. If the plastic on the "slip and slide" creates a frictional force that provides a deceleration of 3.7 m/s^2, how far will Jerry slide before he stops?

2. How long will Jerry be sliding in the above problem?

3. A rock thrown straight down off of a building at 12 m/s accelerates at 10 m/s^2 (actually 9.8, but we will use 10). If the rock falls for 4 seconds, how far does it fall?

4. How fast is the rock in the problem above going after the 4 second?

5. A car accelerates from rest to 30 m/s in 6 seconds, decelerates from 30 m/s to 10 m/s in 4 seconds. How far did the car travel over the 10 seconds?

6. A rock is thrown up into the air at 25 m/s. The acceleration due to gravity is 10 m/s^2 down. What is the rock's position (x_f) at 3 seconds, at 4 seconds and at 6 seconds?

Answers:

1. 6.62 m

2. 1.89 s

3. 128 m

4. 52 m/s

5. 170 m

6. 30 m, 20 m, - 30 m