

UNIT 5 HOMEWORK AFTER SESSION ONE

- Complete the Unit 5, Session 1 activities. Fill in all the entries for *both* investigations one and two.
- *Do the online SmartPhysics Homework for “Newton’s Laws”*
- *Complete the homework entitled "[HOMEWORK FOR UNIT 5-1: FORCE AND MOTION](#)"*
(Credit is equivalent to that obtained by working three text problems).

UNIT 5 HOMEWORK AFTER SESSION TWO

- Complete the Unit 5, Session 2 Activities.
- *Complete the homework entitled "[HOMEWORK FOR UNIT 5-2: COMBINING FORCES](#)"*
(Credit is equivalent to that obtained by working three text problems).
- *Double check to see that the all unit 5 activities are completed and ready to hand in at the beginning of class.*
- *Complete the homework entitled "[HOMEWORK FOR UNIT 5-3: FORCE, MASS, AND ACCELERATION](#)".* (Credit is equivalent to that obtained by working three text problems).

Work the following problem:

(20 pts) **SP5-2)** Suppose a group of 9 people with an average mass of 52 Kg each are put in a cage of mass 250 Kg. If the cage is dropped from a height of 38 metres above the surface of the earth. According to textbook theory (a) Where will they be after one second? (b) How fast will they be moving at that time? (c) What is the force on the whole falling system consisting of the cage and the people. Be sure to indicate the direction of the force. **FOR FULL CREDIT USE THE TECHNIQUES YOU HAVE BEEN PRACTISING FOR CONSTANT ACCELERATION PROBLEMS:** Diagram, v vs. t graph sketch, listing values and unknowns in a table, equation, algebra and solutions, etc.