Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Calculating Work**

1. John is pushing on a car with a force of 400N.   After pushing it 5m, what is the work that John did on the car? Is John's work converted into potential or kinetic energy?
2. David is in training and doing sprints with a parachute.  David pulls with an average force of 150N over the 20m sprints.   How much work does David do on the parachute? Is David's work being converted into potential or kinetic energy?
3. Sonia is doing a plank for 45 seconds.  She weighs 400 N and is holding herself up about 0.2 of a meter off the floor.  What is the work Sonia is doing?
4. Val pulls back a bearing in her new sling shot.   She pulls it back about 30 cm with an average force of 100N.   What is the work that Val does? Is Val's work converted into potential or kinetic energy?
5. What is the work done in lifting a 50 kg box to a height of 1.5m? Is this work converted into Ek or Ep?
6. A rock of mass 4.7 kg is lifted from height 2.1 m to 3.0 m. How much work is done on the rock? Is this work converted into Ek or Ep?
7. How much work does a golfer do lifting a 46 g golf ball out of the hole and up to his pocket (0.95 m above the ground)? Is this work converted into Ek or Ep?
8. If a person carries a 200 N box from one shelf to another (same height but 3 m away), what was the work done?  Is this work converted into Ek or Ep?
9. At the first stage of a roller coaster ride, the roller coaster is pulled up to the top of the first hill.  It climbs 50m with an average force of 20,000N.   What is the work being done on the roller coaster? Is the work done being converted into potential or kinetic energy?