

Name \_\_\_\_\_ Date \_\_\_\_\_

## WORK AND ENERGY

Work on these physic problems below!

- 1) A force of 10N causes a displacement of 2m in a body in its own direction. Calculate the work done by force. (20J)
- 2) A body of mass 2kg is moving with a speed of 20m/s Find the kinetic energy. (400J)
- 3) A moving body of 30kg has 60 J of KE. Calculate the speed.
- 4) How much force is applied on the body when 150joule of work is done in displacing the body through a distance of 10m in the direction of force? (15 N)
- 5) A body of 5kg raised to 2m find the work done (98J)
- 6) A work of 4900j is done on road of mass 50 kg to lift it to a certain height. Calculate the height through which the load is lifted. (10m)
- 7) An engine work 54,000) work by exerting a force of 6000N on it. What is the displacement of the force. (10m)
- 8) A machine does 192 J of work in 240Sec. What is the power of the machine? (8w)
- 9) A force of 5N acting on body at angle of 300with the horizontal direction displace it horizontally through of distance of 6 m. Calculate the work done. ( $15\sqrt{3}$  J)