

Work – The Transfer of Energy

Name: _____ Date: _____

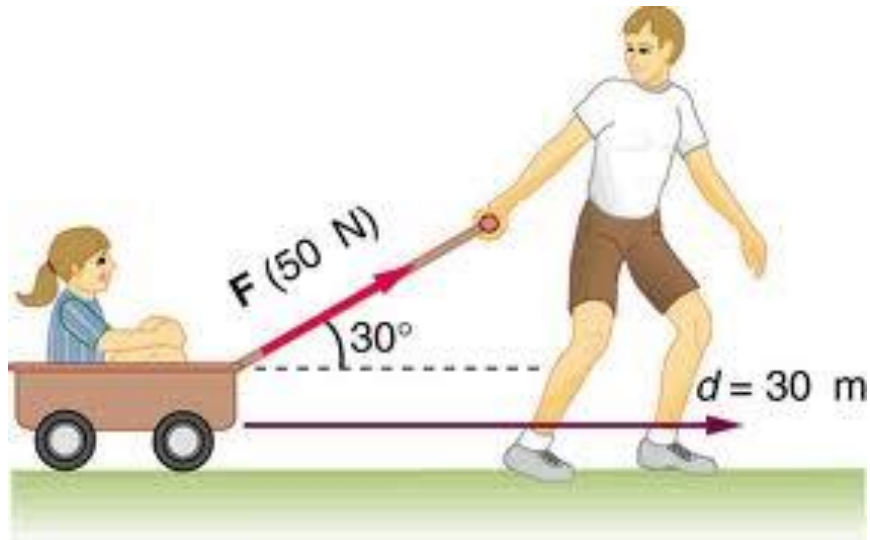
Mathematical Description of *Work done on an object...*



The **Joule** is named after *James Prescott Joule* (1818-1889), an English scientist who did pioneering research into the relationship between work and heat.

In general: 1 joule is the amount of work done to by an applied force of 1 Newton acting through a displacement of 1m, in the same direction.

Important Point: Only the force component in the direction of motion does work on the object.



3 Zero Work Cases

Case 1:

Case 2:

Case 3: