Who's Got the Power?

Objective: To explore the relationship between work, power and energy

Formulas:

1 kg = 2.2 pounds
Force (N) = mass (kg) x acceleration (m/s^2)
Acceleration due to gravity = $9.8 m/s^2$
Work (J) = Force (N) x distance (m)
Power (W) = Work (J)/time (s)

Data and calculations:

Option 1: Walking

WALKING	Distance (m)	Mass (kg)	Force (N)	Work (J)	Time (s)	Power (W)
Student 1						
Student 2						

Option 2: Running

RUNNING	Distance (m)	Mass (kg)	Force (N)	Work (J)	Time (s)	Power (W)
Student 1						
Student 2						

Option 3: Climbing Stairs

Height of Stairs: _____ inches… and in meters: _____

CLIMIBNG STAIRS	Height of Stairs Climbed (m)	Mass (kg)	Force (N)	Work (J)	Time (s)	Power (W)
Student 1						
Student 2						

Conclusions and Analysis: