Wk 27 Energy

D2: Finding TME

name:

1. I did 20 J of work bringing a ball up a hill, then I did 30 J of work kicking it.

TME:		
KE +	GPE +	EPE

2. I did 2 J of work lifting a rock, then I did 6 J of work putting it in my slingshot and pulling it back.

TME:		
KE +	GPE +	EPE

3. A jet does 100,000 J of work getting up to speed on the runway before take-off.

TME:		
KE +	GPE +	EPE

4. A weightlifter does 3,000 J of work lifting a barbell.

TME:		
KE +	GPE +	EPE

5. I do 1 J of work picking a dart up off of the floor, and then I do 5 J of work pushing it into the dart launcher.

TME:		
KE +	GPE +	EPE

Wk 27 Energy

D2: Cons of Mechanical Energy

name:

1. BEFORE: I did 35 J of work bringing a ball up a hill, and I did 40 J of work kicking it.
AFTER: It rolled down to the bottom of the hill (no height), moving fast.

TME before:			=	TME after:		
KE +	GPE +	EPE	=	KE +	GPE +	EPE

2. BEFORE: I did 1 J of work lifting a rock, then I did 4 J of work putting it in my slingshot and pulling it back.
AFTER: Because I shot it straight up, it went up very high and came to a halt (no Kinetic) for a moment.

TME before:			=	TME after:		
KE +	GPE +	EPE	=	KE +	GPE +	EPE

4. BEFORE: A jet had 15,000 J of Gravitational PE and 30,000 J of Kinetic.
AFTER: The jet dove down until it had only 10,000 J of Gravitational PE.

TME before:			=	TME after:		
KE +	GPE +	EPE	=	KE +	GPE +	EPE

5. BEFORE: I do 2 J of work picking a dart up off of the floor, and then I do 3 J of work pushing it into the dart launcher.
AFTER: It rose up to a height where it had 4 J of Gravitational PE

TME before:			=	TME after:		
KE +	GPE +	EPE	=	KE +	GPE +	EPE