PROJECT HELP (8th PROJECT) SS (Younger Students)

DUE DATE

May 15th 8th Project – SOLAR SPARK COLLECTOR – If you want to try out your fire starter, please bring to your last class period to assist in lighting your "campstove" fire.

Students will construct a solar-photon/light collector used to heat tinder/fire starter (among other things). Radiant energy from the sun will be directed towards the upper spring.



The kinetic radiant energy of "light" or sunlight in the form EM rays/waves is converted to heat energy. The parabola-shaped disk bends/alters the angle of incident sunlight to target whatever is placed into the loosely wound spring.

INSTRUCTIONS - (PARENTAL SUPERVISION REQUIRED)

1. Pinch the shaft portion of the loosely wound spring and push it into the tightly wound spring.

2. Twist the shaft so that the bent end slides under and into the spring to hold the upper portion in place.

3. Place tightly wound spring into the small holder on the reflector disk (a parabola).

4. The finished reflector should face the sun to focus the light at the upper spring. BE CAREFUL NOT TO SHINE THE LIGHT IN ANYONES EYES. THIS IS A **FIRE STARTER**!



Note, the spring set up can be stored folded.



Tinder can be held in place by the upper spring. To use as a fire starter, you will need to have a well built, ready to light, fire pit with fuel (sticks, more tinder).

As a dish or curved reflector, the incident angle (angle coming in) is bent and reflected at a different angle causing the light rays to be concentrated.

