

Made in the Shade

1. Take one plate of spinach to a scale.
2. Place an empty plate without spinach on the scale and press the tare button.
3. Replace the empty plate with the spinach plate. Record the mass as the starting mass on your worksheet.
4. Place the plate directly under your lamp.
5. When instructed to do so, turn your light on. A class timer will be set for 25 minutes.

If you are modeling crops Under the Solar Panel:

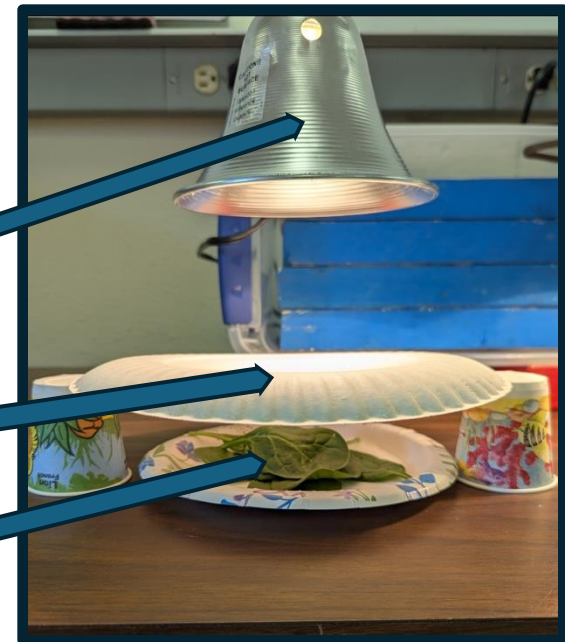
- Place two small cups on either side of your spinach plate.
- Balance the large plate on the cups to shade your crops.



Sun

Solar Panel

Crop



Solar Panel Efficiency

1. Attach the multimeter to the solar panel (red to red and black to black).
2. Turn the multimeter knob to the left to select **voltage range 20 V**.
3. Hold the solar panel above your bead crops.
4. Turn on the flashlight and shine it down on the solar panel and solar beads.
5. Take energy readings at various angles above the solar panel to find the position where the most energy is generated AND the most beads are changing color.
6. Answer questions 6-9 on your worksheet.

