



Green Our Planet's School Garden Curriculum

Title: **Capturing the Sun**

Topic: Plant Parts and Functions – Are Plant Leaves Like Solar Panels?

Link: <https://www.youtube.com/watch?v=hhztpX-bU3o&feature=youtu.be>

Grade Level: 1

Standards: 1-LS-1 (at 0 :39)

Objectives: (at 0:59)

- Make and record observations about plant leaves
- Describe function of plant leaves
- Describe role the leaf plays in plant food production

Segments:

- Teacher segment: 0:28 - 1:07
- Student segment: 1:08 - 10:52
- Quiz 10:54 - 12:34

Concepts and/or Topics Covered & Vocabulary Notes:

- Reviews plant parts and how plants grow (seeds / soil / water / sun / air-wind / roots / stem)
- Defines solar panels and discusses how plant leaves function as solar panels
- Vocabulary section at end (12:35)

leaf

energy

solar

sprout

sunlight

hypothesis

- Possible additional vocabulary:

nutrients/nutritious

taproot

absorb vs release

element

cotyledon vs. true leaves

convert

carbon dioxide vs oxygen

Methodology:

- Some reading and writing and drawing (plant parts)
- Nice visuals/photography showing plant growth
- Quiz at end includes open-ended questions, multiple choice, and true/false

Possible Supplemental / Follow-up Activities:

Suggested “challenge” (10:35 in video) - Take a walk or go to a yard/garden and observe leaves. How many solar panels do you see?