

What is Solar? Lesson Plan

Grades: 5th-8th

| Overview | Vocabulary |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Students will develop an understanding of how solar power is used and how it can help reverse the effects of climate change. | Energy Electricity Solar Renewable Resource Non-renewable resource Climate Change |

| Essential Question | Provoking Questions |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Why should we use the sun as a source of energy? | Grades 5th+6th: What needs electricity in your home? In your school? Grades 7th+8th: How do our energy sources influence climate change? |

| Lesson Objectives |
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| The learner will... <ol style="list-style-type: none">1. Describe the difference between renewable and non-renewable2. Why fossil fuels are harmful for the environment3. Where and how solar panels are used |

| Direct Instruction |
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| <ol style="list-style-type: none">4. Introduction to energy/electricity. Students are prompted to create a list of everything they think requires electricity in their lives.5. Share different items on electricity lists. Discuss what energy looks like in you and me. Do we get tired if we move too much? What does it mean to conserve energy? Try this activity: dance and move around as much as you can for 5 minutes, how does your body feel?6. Introduce climate change and energy sources. What is non-renewable and what is renewable? Use a visual or hands on activity to teach the difference.7. Solar Power: Use PowerPoint presentation to give an overview of what solar is and what it is used for. |

8. Closing activity: Solar prints. Begin activity by asking students to make guesses on what they think will happen with the paper. Discuss what it might look like in a shady spot.
9. Share final solar prints with each other and reflect on the sun being used as a renewable resource.
10. Fill out exit ticket or verbally share what we've learned.

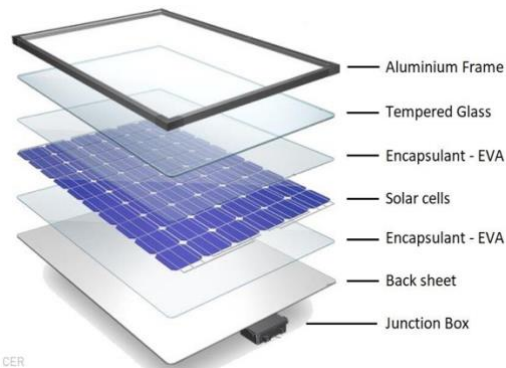
Modifications/Adaptations

Small motor skills:

Twice exceptional:

Varying skill level:

Visual Provocations



Instructional Resources

[Electricity Generation Flash Cards](#) from Vermont/New Hampshire Energy Education Program

Technology

PowerPoint presentation

Assessment

11. Exit ticket: see below
12. Checklist kept by instructor checking for: a) attention to craft b) understanding the purpose of a portfolio

Exit Ticket:

| | |
|------------------------------------------------------------------------|--|
| Name: | |
| Why should we use renewable resources instead of non-renewable? | |
| What are some ways you can conserve energy at home? | |