

FIELD TRIP: **Solar Farm in Albuquerque, NM**



Running Time: 3:26
NGSS: MS-ESS3-5

On site at a sunny solar farm in New Mexico, VVR Host, Steve Grubbs and the President of Affordable Solar, Kevin Basselleck, discuss how solar panels work. The goals and benefits of solar energy and why it's optimal for the Southwest are revealed too. Additionally, students learn about the types of education and experience typical for people who pursue a career along this pathway. For more information visit: ThinkAffordableSolar.com/learn/solar-works/

INTERACTIVE EXPERIENCE: **Racing for Answers**



Running Time: Self-paced*

Students are motivated to learn as they drive their virtual race car around the track. Each lap presents a new prompt based on unit content. As they drive around the track, racers are presented with sets of answer options. In order to tag the correct answer, they move the car to the right or left (by turning their heads) to run over their selection. The more correct answers they drive over, the higher score they will earn. Racers select their driving speed for a comfortable pace.

THEATER 1: **George Washington Carver**

Running Time: 6:22



Topics Covered

- Highlights of Carver's life
- Topics of soil depletion and crop rotation

Assessment Answer Key & Critical Thinking Skills

1. D (BT5--synthesis)
2. A (BT2--comprehension)
3. D (BT5--synthesis)
4. C (BT1--knowledge)
5. B (BT4--analysis)

THEATER 2: **Finding Solutions**

Running Time: 5:39
NGSS: MS-ETS1-1, MS-ETS1-3



Topics Covered

- Overview of process and solution stages
- Concepts of ideation, conceptualization, and design phases

Assessment Answer Key & Critical Thinking Skills

1. C (BT3--application)
2. D (BT4--analysis)
3. B (BT2--comprehension)
4. A (BT1--knowledge)
5. D (BT2--comprehension)

TEACHER DEMO: **Drag Racing with Wendy**

Running Time: 6:48
NGSS: MS-ETS1-2, MS-ETS1-3, MS-ETS1-4



Topics Covered

- Topics of aerodynamics and horsepower
- 3 cars race using different variables

Assessment Answer Key & Critical Thinking Skills

1. A (BT2--comprehension)
2. D (BT4--analysis)
3. C (BT3--application)
4. C (BT2--comprehension)
5. B (BT1--knowledge)

Science Standards:

NGSS: MS-ESS3-5, MS-ETS1-1, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4; **TEKS:** 7(b.1.A), 7(b.2.A), 7(b.2.D), 7(b.2.E), 7(b.3.A), 7(b.3.D), 7(b.4.A), 7(b.4.B), 7(b.5.B), 7(b.8.B), 7(b.10.A), 7(b.10.B); **CPALMS:** SC.7.E.6.6, SC.7.L.17.3, SC.7.N.1.1, SC.7.N.1.3, SC.7.N.1.5, SC.7.N.1.7, SC.7.N.2.1, SC.7.N.3.2, SC.7.P.10.2, SC.7.P.11.2,