Materials Needed and Instructions

Materials Needed:
- Scissors
- Die (1)
- Playing Tokens/Pieces
- Card Templates (Printables)
- Board Game (Printable)

Instructions:
1. Print out the card templates.
2. Sort the templates into two groups:
   - The first group will contain the “Testing Your Solar Knowledge!” cards.
   - The second group will contain the “Sun Board Game” cards.
3. Take the “Testing Your Solar Knowledge!” cards and cut along the dashed lines on the card template. Match the questions and answers by looking at the top right symbols. (ex: green triangle goes with green triangle; blue circle goes with blue circle)
4. Take the “Sun Board Game” cards and cut along the dashed lines on the card template. Match the questions and answers by looking at the color of the words. (ex: green words go with green; blue words go with blue words)
5. Once all cards are cut, sorted, and matched, place them to the side, next to the board game.
6. Assign each player a playing token. Each player will use this piece to move around the board.
7. The youngest player rolls first, followed by the person on the youngest player’s right and so on.
8. Follow the playing directions on the board game and you’re all set!
Testing Your Solar Knowledge!

**True or False**
Unlike energy from coal or oil, solar energy doesn’t create pollution.

**True**
Solar energy systems do not produce air pollution, water pollution, or any greenhouse gases!

**False**
Households with solar panels won’t have electricity when the sun isn’t shining.

**False**
Don’t worry, you’ll still have electricity even when the sun isn’t shining. Most solar energy systems store any excess electricity solar panels create, so you’ll still have electricity on those cloudy and rainy days!

**True**
Solar Power is the most abundant energy source on Earth.

**True**
One year’s worth of solar energy would far exceed ALL reserves of finite energy resources, like nuclear or fossil power!
Testing Your Solar Knowledge!

Solar Questions

Renewable energy is energy that a) is limited b) won’t run out c) will take thousands of years to replenish d) comes from the ground

What state ranks first in generating electricity from solar power? a) Arizona b) California c) Texas d) Hawaii

b) won’t run out!

b) California!
Testing Your Solar Knowledge!

Fill in the Blank

Plants convert sunlight into chemical energy through the process of ________.

PHOTOSYNTHESIS!

Solar power is power generated directly from ________.

SUNLIGHT!

A ________ cell is an electronic device that converts sunlight into electricity.

PHOTOVOLTIAC/ SOLAR!
Sun Board Game

You have just turned 18 and want to buy a solar powered car. What are some benefits of getting a solar powered car instead of a normal car?
- Helps the environment
- Does not cause noise or air pollution
- Can drive up to 500 miles in one charge!

Your family is thinking about buying and using solar panels. How would you convince them of using solar panels instead of natural gas?
- Solar energy is unlimited!
- Solar energy is a clean energy
- Solar energy is cheaper than using natural gas

The neighborhood you live in wishes to install solar power lamp posts. Name 3 benefits in using solar street lights instead of traditional lights.
- Solar Street lights produce non-pollutive electricity. Solar street lights can produce up to 25% more light!
- They are easier to install and to make repairs on.

Your school is planning on buying solar panels instead of paying for electricity. In what ways would this help your school?
- This would reduce your schools carbon footprint up to 30%
- This would help open up funding for your school to spend on field trips!
Your best friend’s dad is trying to buy solar panels. But he’s not fully convinced. How would you convince your best friend’s dad to buy solar panels?

Installing Solar panels would reduce your electricity bill greatly. Even if the sun isn’t out, your solar panels would still work! Your Solar power would never run out!
**Directions**

1) Roll the number cube and pick up a card.

2) If you answer the card correctly, you can move the number of spaces on the dice!

3) If you don’t answer correctly, stay in your tile!

4) Continue to play until someone reaches the finish. Then see who comes in second, third, etc.

Good luck on your journey to becoming a solar expert!