



## Game: Power Up!

A card game where players try to “power up” places with solar panels.

**Players:** 2 – 4 players

**Ages:** 6 – 10

### Materials:

- One standard deck of playing cards
- *Cyberchase* Power-Up Cards, one set of 5 cards per player (included)
- “Power Up” Info Card, one per player or group (included)

### Getting Ready:

- Print one sheet of Power-Up Cards per player. Cut out the cards, creating a set of all 5 cards for each player.
- Print the “Power Up” Info Cards, one card per player or group.

### Playing the Game:

1. Put one set of Power-Up Cards per player onto the middle of the table. Deal 7 playing cards to each player. Place the rest of the deck face down in the middle of your playing area. *Note: Throughout the game, players should always have 7 cards in their hands.*
2. The player to the left of the dealer goes first and checks whether s/he has playing cards that add up to the number of solar panels required on a Power-Up Card. The cards must add up to the exact value on the Power-Up Card. (They don’t have to be from the same suit.) *Tip: Refer to the “Power Up” Info Card for values.*
3. If s/he has cards that add up to the solar panels listed on a Power-Up Card, s/he can claim that card by saying, “Power Up [name of item].” For example, “Power up snack bar!” or “Power up fun house!” After showing the playing cards to the other players, the player places the Power-Up Card (and the playing cards used to claim it) in front of him/her. The player then draws cards from the deck until s/he has 7 cards in hand again.
4. If the player isn’t able to claim a Power-Up Card, s/he draws one card from the deck and puts one card from his/her hand on the bottom of the deck.
5. Play continues to the left, with each player trying to claim Power-Up Cards (as described in steps 2-4 above).
6. Pay attention! Players can use a Joker to steal a claimed Power-Up Card from another player.
7. The game continues until someone wins by collecting all five Power-Up Cards and successfully powering up all five places.

*Tip: If you go through the whole deck of cards before the game is over, return to the deck all the playing cards which were used to claim Power-Up Cards. Re-shuffle the deck and place it back in the playing area for players to draw from. Make sure to hold onto all of your claimed Power-Up Cards!*

Watch the *Cyberchase* clip “Going Solar: For Real” to see kids play Power Up!

### You Need to Know...

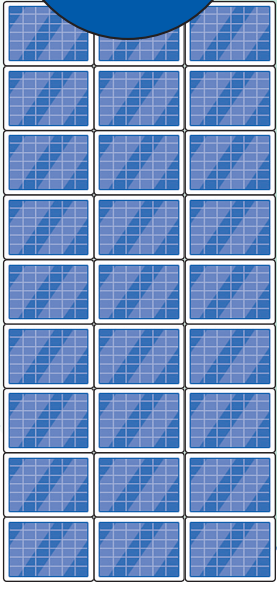
- Solar panels collect energy from the sun.
- Solar power can power lights, phones, computers, TVs and lots of other things that run on electricity.
- Different objects use different amounts of energy.
- Increasing the number of solar panels produces more power.

Find more math games and activities at [pbskids.org/cyberchase](https://pbskids.org/cyberchase)

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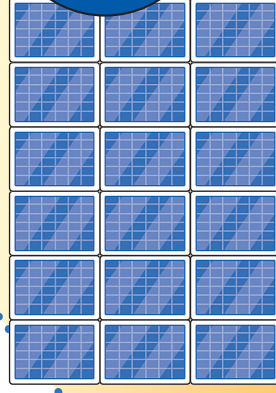
solar panels



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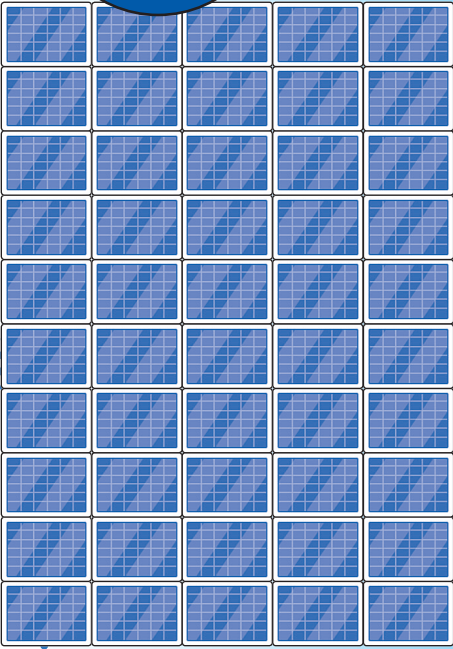
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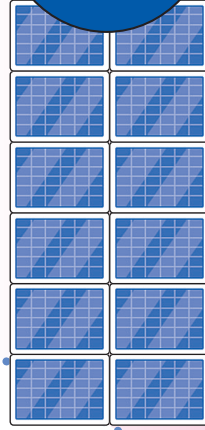
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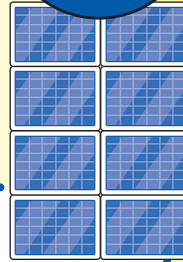
solar panels



Cyberchase

8

solar panels



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### "Power Up" Info Card

Values of playing cards:

- **Face cards** (Jack, Queen, King) = 10
- **Aces** = 1
- **Number cards** = number on the card  
*(2s are worth 2 points, 3s are worth 3, etc.)*
- **The Joker** = Wild Card! Can be used to steal a Power-Up Card claimed by another player.

Number of solar panels needed for "power up":

- **Ice Cream Stand:** 8 solar panels
- **Game Booth:** 12 solar panels
- **Snack Bar:** 18 solar panels
- **Fun House:** 27 solar panels
- **Merry-Go-Round:** 50 solar panels



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