

MICHAEL GRÄTZEL

THE SOLAR SCIENTIST 

NAME: _____

DATE: _____



Learning from Nature



"Meet Michael Grätzel! He is a clever scientist who looked at trees to invent a new way to catch sunlight. Plants use their green leaves to turn sunshine into food. Michael invented a special solar cell that works just like a leaf! It uses colorful dyes (like paint) to turn sunlight into ****electricity****. His invention is super cool because his solar cells can be bendy, colorful, and even see-through like glass! This helps us get clean power without hurting the Earth."



1. SOLAR WORDS

Fill in the blanks using the word bank to learn how Michael's invention works!

Plants

Sunlight

Glass

1. Michael watched how use the sun to grow.
2. A solar cell catches to make electricity.
3. His special cells can be see-through just like!

2. CATCH THE SUN!

Michael's solar cells need sunlight to work. Put a checkmark (✓) next to the places that would be good spots to put a see-through solar panel to catch the sun.

☐

A House Window

☐

A Dark Closet

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A Car Sunroof

☐

Underground Tunnel

☐

A Glass Greenhouse

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Inside a Drawer

3. MY COLORFUL SOLAR POWER

Because Michael's solar cells use dye, they can be bendy and brightly colored! Design your own colorful, solar-powered backpack that charges your tablet while you walk outside.



Draw your amazing solar backpack here!



FUN FACT: Michael's invention is often called an "Artificial Leaf" because it mimics nature!

