Case Study

THE ASHOK LEYLAND SCHOOL

HOSUR, INDIA

The Ashok Leyland School, Hosur is one of Microsoft's Showcase partner schools, which is one of 1,000 schools around the world integrating technology with learning solutions in order to transform education. By partnering with Microsoft and Mindsets, the teachers at The Ashok Leyland School in Hosur, India are helping their students become part of a globally connected world.

The Ashok Leyland school started its Mindsets journey in December 2018 with its entire Grade 8 cohort of 187 students and their teachers (Science and Maths). The students applied design thinking and their mathematical skills to study real-life problems which they do in small teams of 2-3 students. Students collaborate as they make predictions, analyze data, make recommendations & decisions in an environment where often, there is no right or wrong answer. Teachers facilitate the class live and have access to inbuilt professional learning.

In the *Solar Energy Challenge* students created a video of their findings to explain how the University of California should design solar panels on its key buildings. The students used design thinking to study this real life problem and determined the surface area of the buildings and the number of solar panels needed.

SOLAR ENERGY FOR POWER

Help the University of California become the world's first school to become carbon neutral. Estimate how much energy is needed to power up the buildings at the University.

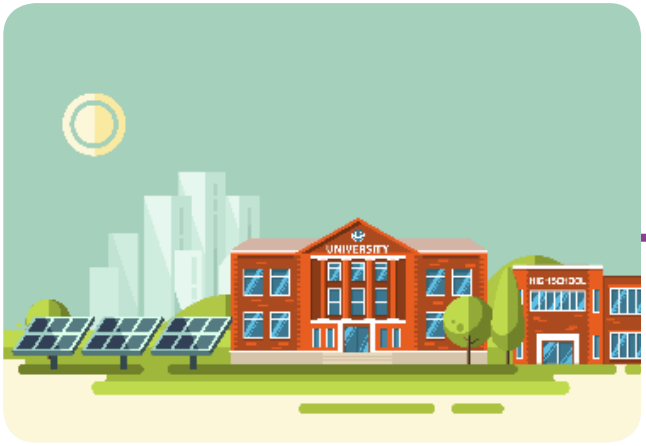
Geometry: Area | Intermediate Level | 3 Polls - 14 Questions - 1 Bonus

Step 1

What is solar power?

How do solar panels work?

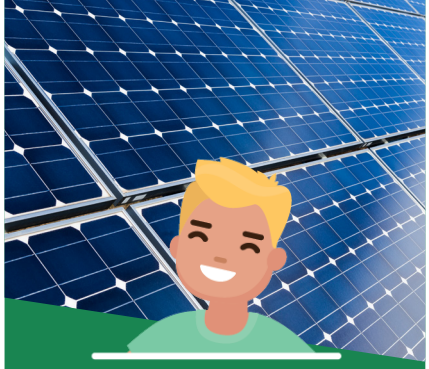
See who is using them.



Step 2

How much energy will a building use in a month?

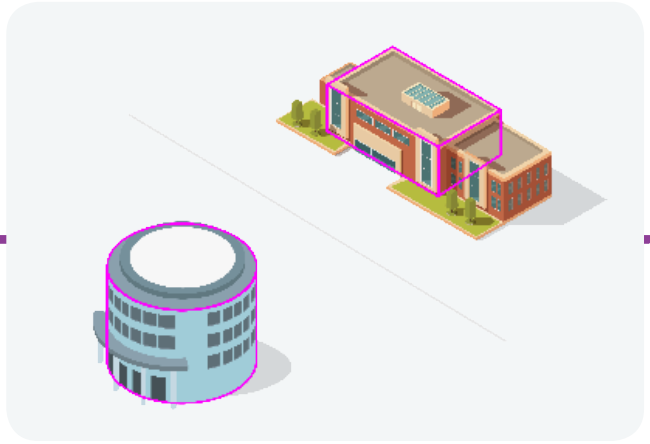
Calculate the floor area of the 5 storey engineering building, Etcheverry Hall to estimate how many solar panels are needed.

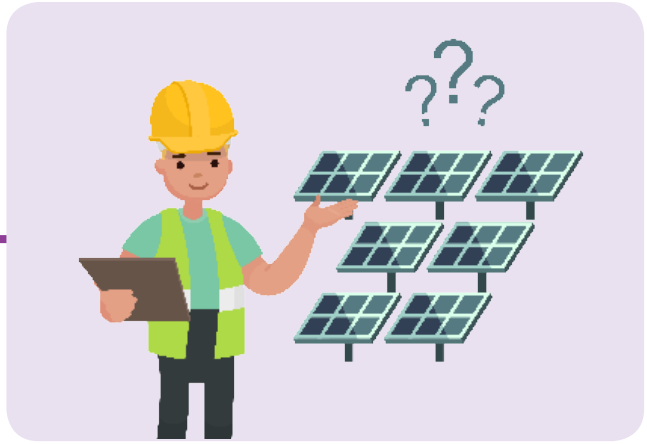


Solar Energy for Power

Step 3

Ready for your second building!
You can now work on a solar design for your second building at the University - which one will it be? LeConte Hall or Advanced Light Source Laboratory?





Bonus!

Time to work on a solar plan for your school!
Create a proposal for your principal describing how many solar panels the school would need to be energy efficient.

+ PLUS project extensions....

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"We are excited to partner with the team at Mindsets Learning to drive excellence in STEAM outcomes via their innovative real world challenges.

Anthony Salcito

Managing Director of Microsoft Education

The projects sparked creativity in the students. They had to behave as engineers to decide on the number of Solar Panels needed for a specific building. This also helped them to improve their analytical skills.

Florence Johnson

Section Head (Grade 8-10) - The Ashok Leyland School"