Project 1
The sun and solar energy

Suggested age: 3 to 5
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Summary
This project explores the sun; what it is, the energy it produces and how we can use it through solar energy to create light when we need it most.

Outcomes
• Through personal and group led investigation students learn where the sun is in relation to themselves, how the sun feels, that it produces energy and that we can use that energy through solar technology.
• Students will engage observational and questioning skills to explore this topic.

Introduction
The sun is the connector between everyone on earth, we are all touched by the same sun and we all experience the power generated through the sun in many ways every day.  What do we already know about the sun and what can we learn about it through observation and experience? How can we use the energy of the sun to bring us light when we need it most?
FEEL

Take a walk outside to find the sun.

Ask:
Where is it? Possible answers: Over there?
Above us? Deep in space?

Find a nice, sunny place away from distractions and have the students stand and face the sun with their eyes closed.

Ask:
How do we know the sun is there even if our eyes are closed?
Can we feel it’s warmth on our skin? Can we see it glow through our eyelids?

ACT

The warmth we can feel from the sun is its energy touching our skin.

Ask:
How else can we produce energy? Engage students in other forms of energy creation such as rubbing their hands together, jumping up and down.

Ask:
How else can we use the sun? We can create shadows with our body.
Shadows – experiencing shadows, the difference in temperature and brightness.
Look at shadows. Feel how cool it is in the shadows. Draw students’ shadows with chalk. Create animal shapes in the shadows with the students bodies (a snake, an elephant etc) and draw the shape on the pavement.

Ask:
*How else can we use the energy of the sun?*
*Through solar energy.*

Hand out Little Suns, some charged and others not charged. Let the students find out which ones produce light and which ones don’t.

Ask:
*What should we do with the Little Suns that don’t work?*
*What do they need? The sun.*

Ask:
*Ask the students who have Little Suns that don’t work to take them into the sun, place on a window sill or wherever they can stay and let them charge for the day. When they return at the end of the day their Little Suns will be charged and ready to use again.*

KNOW

Now we know what the sun is, that it creates energy that we can use it through solar powered devices like Little Sun. Now that your Little Sun is charged with all the energy from the sun you can use it now or take with you to use when you need light at night.