

Exploring Materials—Stained-Glass Window

ENCOURAGE CREATIVITY

- Encourage participants to **create layers** inside the contact paper using different colors. Have them **observe the difference** in the amount of light that comes through depending on the thickness and color of paper.
- Encourage visitors to **create different shapes and patterns** out of the contact paper to customize their project. They can **plan a design** for their stained glass such as a repetitive pattern, or a picture of a flower, animal, etc. Suggest they create a greeting card or bookmark out of their stained glass.

Plan ahead: Extra contact paper and scissors are necessary for this extension.

MAKE IT PERSONAL

- Tell the participants that researchers at the University of Michigan are putting **solar panels in stained glass windows**. Not only does it enhance the color of the windows, it also gives us another method to harvest clean energy! What would your house or school look like if windows were used like this to generate energy? Imagine if the windows of skyscrapers in big cities could be power plants that generate all the electricity needed for the city.

For more information, visit www.popsci.com/article/science/stained-glass-windows-double-solar-panels and www.nature.com/srep/2014/140228/srep04192/full/srep04192.html