

WORKSHOP EXTENSION ACTIVITY

Built by The Home Depot Kids Workshop

December 2020: Santa's Treats Tray

Ages 5-12

CONNECT.

Imagine that it's Christmas Eve. Around the world, children are preparing tasty treats to leave for Santa Claus. If you were Santa, what kinds of goodies would you hope for?

INVESTIGATE.

Thankfully, Santa likes all kinds of treats...and eating them is one of the easier parts of his job! But have you ever thought about how Santa gets to the treats and milk that children leave in each home? After going down the chimney, he often enters a dark room and then must tiptoe around, being careful not to knock anything over!

This year let's help Santa by creating a glow-in-the-dark tray that he can find a little more easily.

You'll need:

- A piece of scrap paper
- Glow-in-the-dark paint
- Paper plate
- Artist paint brush set

Before you make any changes to Santa's Treats Tray, test how glow-in-the-dark paint actually works:

1. Place some paint onto the paper plate, and then use the paintbrush to paint a design on your scrap paper.
2. Let the painting dry in a dark place. Once it's dry, take a closer look. Does it glow?
3. Next, bring your painting into a well-lit room for just a couple minutes. Then bring it back into the dark room. Does it glow more or less than before?
4. Finally, place your painting directly under a light for at least 10 minutes. Then bring it back into the dark room one more time. Does it glow more or less than the other times? Why do you think this happens?

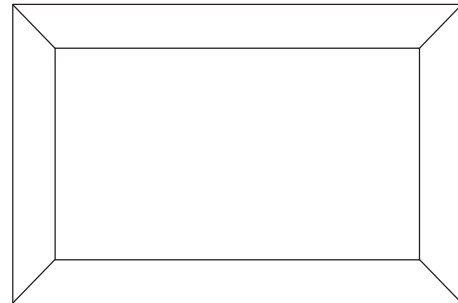
Here's why! Light is made up of lots of tiny particles called photons. Photons have a huge amount of energy and travel very, very quickly—and our eyes see them as light! While some lights (like the sun) shine constantly, others (like lightbulbs) get their energy from electricity.

Glow-in-the-dark paint is a little different: It contains a special mix of chemicals called phosphors. Like cellphones, the phosphors need to be charged in order to work. When you place glow-in-the-dark paint under a bright light, its phosphors absorb photons. The phosphors then later release these photons, which is the glow you see when you bring glow-in-the-dark paint into the dark!

INNOVATE.

You'll need:

- Your Santa Treats Tray
 - Your paint supplies from above (glow-in-the-dark paint, paper plate, and artist paint brush set)
 - Highlighter
1. Now it's time to use your new knowledge to help Santa! Look at the glow-in-the dark paint that you have available and think about how you could use it to decorate Santa's Treats Tray. It may be helpful to test a little on a corner of the tray so you can see what it looks like when it's applied.
 2. Next, create a plan and highlight the image below wherever you'll want to apply paint. You may choose to cover the entire tray, or you could just coat certain sections. Think about what may help Santa most!



3. Once you have a plan that you're happy with, shift your focus to Santa's Treats Tray. Paint your glow-in-the-dark design, and then store it in a safe place while it dries.
4. When Christmas Eve comes around, keep your tray in a well-lit area for as long as possible. Then place a tasty snack on a plate with a glass of milk on the tray right before you go to bed. Thanks to your work, Santa will be able to use the glow of his new tray to guide him to his treats!

