

Twirling Christmas Tree! A Dazzling Festive Craft!

October 22, 2024 / DIY / STEM Activities / Marvelous Mechanics Motion / Age 6 - 8 / Rotating Christmas Tree



At Christmas, even the Christmas tree wants to spin merrily! This isn't magic, but the charm of science! In this experiment, you'll see the Christmas tree dance and rotate as the flame rises.

- Age: 6-8
- Time: Less than 30 minutes

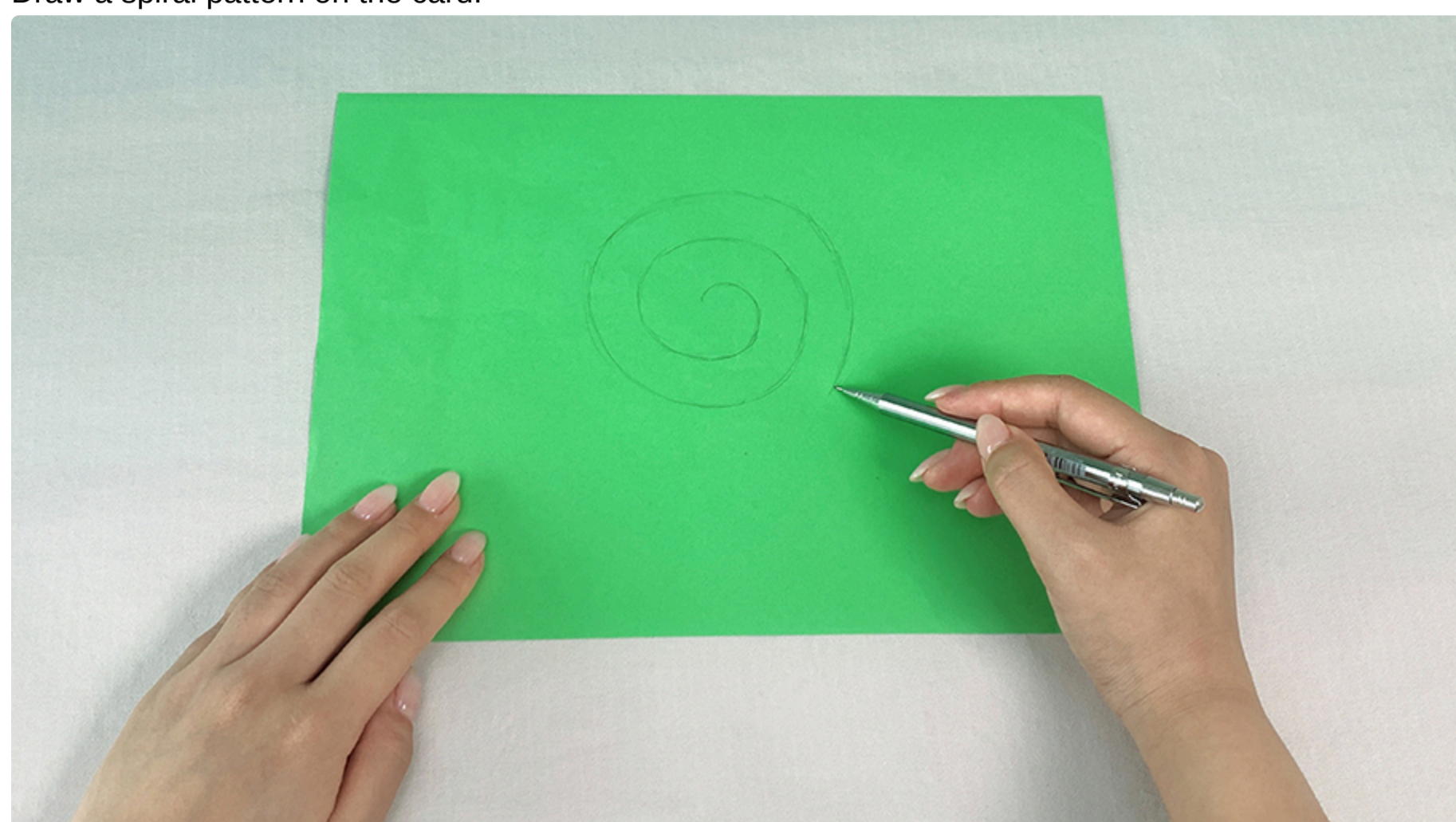
Materials Needed:

Card
Candle
Lighter
Scissors
Wooden stick
Pen
Plasticine

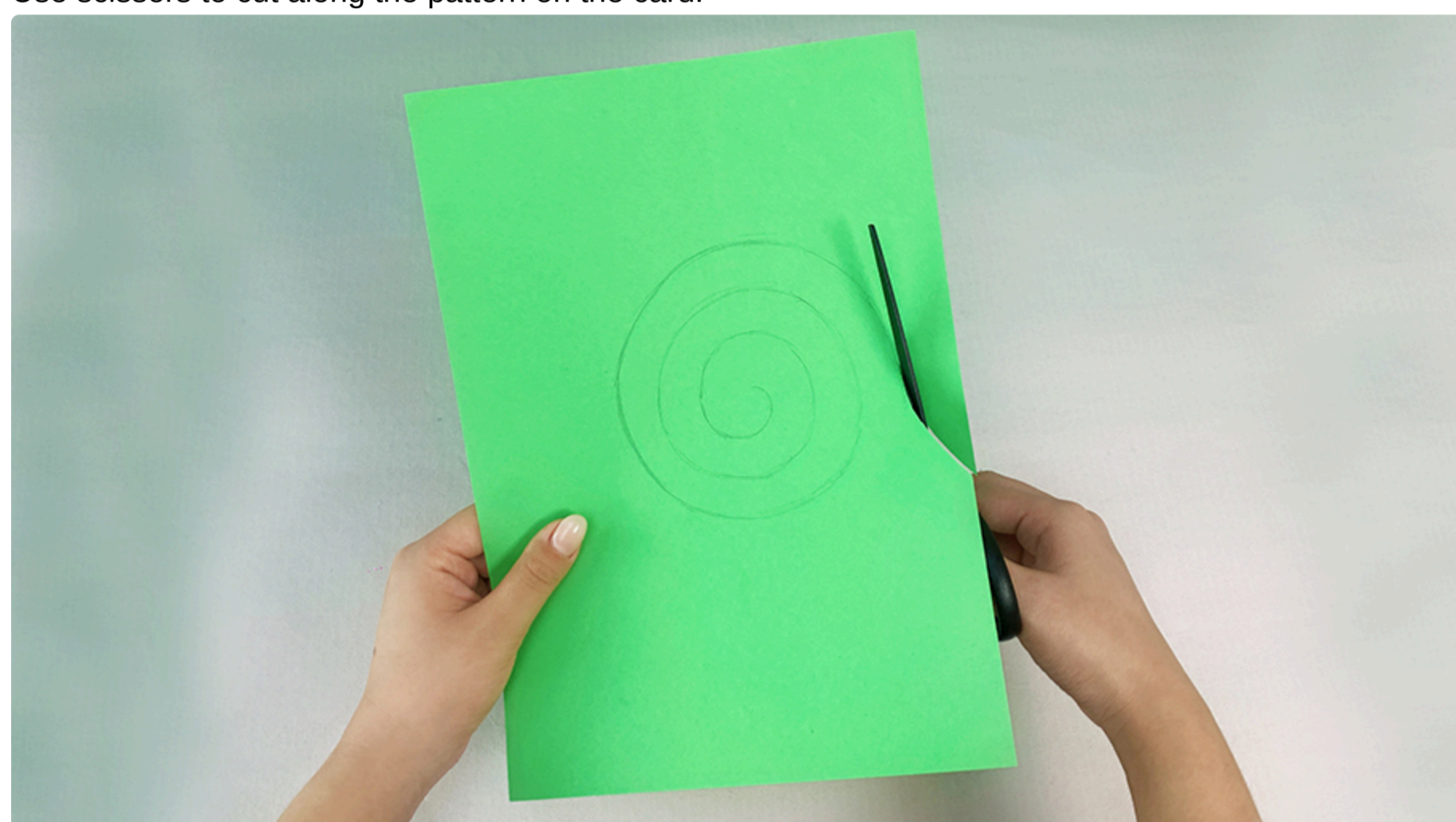


Step-by-Step Instructions:

1. Draw a spiral pattern on the card.



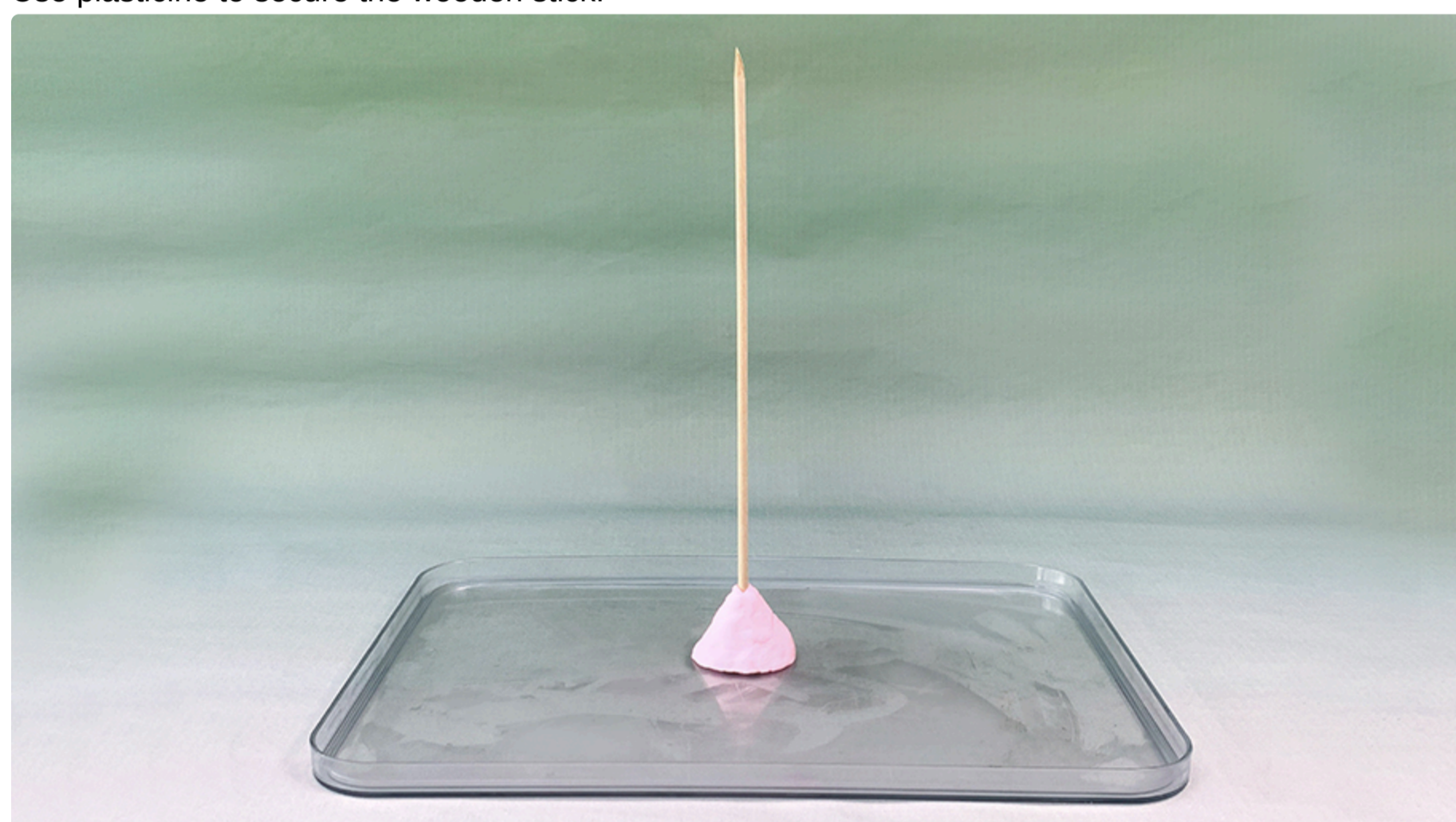
2. Use scissors to cut along the pattern on the card.



3. Cut out star decorations.



4. Use plasticine to secure the wooden stick.



5. Hang the cut green card on the wooden stick and decorate it with stars.



6. Place lit candles on both sides. You'll notice that the moment you place the candles, the Christmas tree starts to rotate.



The Science Behind It:

The experiment primarily involves the rising of hot air and convection. When you light the candle, the flame heats the surrounding air, making it lighter and less dense, causing it to rise. The rising hot air causes the paper strip to rotate. The shape and weight distribution of the paper strip makes it more susceptible to air movement, causing it to spin.