

Exploding Ninja Stick Bomb

OK, this isn't really a bomb and these sticks aren't really going to explode; but it's a neat trick and a great demonstration of a chain reaction.

YOU WILL NEED

Five wooden craft sticks



1

Start by making a "V" shape like this, with one stick overlapping the other at the bottom of the "V."



2

Place a third stick on top of the first two, like this.



3

Holding the shape at the bottom, insert the next stick, as shown.



4

Slide the stick you just inserted down a little and weave the final stick over and under, as shown.



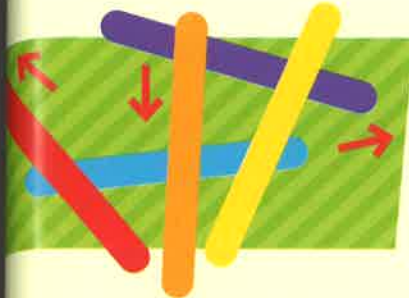
5

And here's the finished "bomb" ready to be exploded.



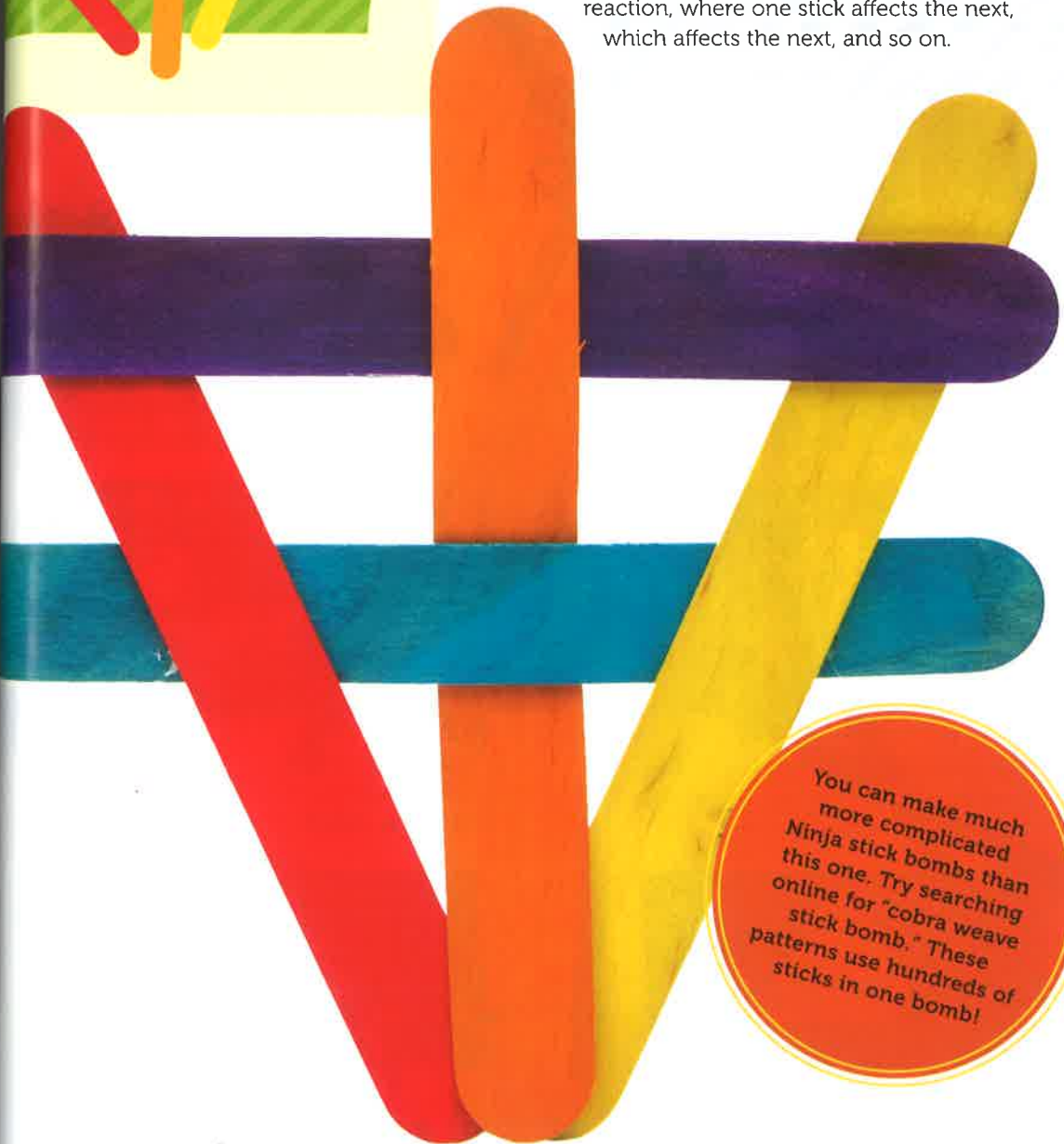
6

Drop the "bomb" onto a hard floor, such as tiles. When it hits, the sticks will fly off in all directions.



THE SCIENCE: CHAIN REACTION

As you weave the sticks together, you can feel them straining against your fingers and against each other. As soon as the "bomb" hits something, the balance is broken and the sticks fly apart as they return to their natural state: straight, and not under tension. This is an example of a chain reaction, where one stick affects the next, which affects the next, and so on.



You can make much more complicated Ninja stick bombs than this one. Try searching online for "cobra weave stick bomb." These patterns use hundreds of sticks in one bomb!