



## Cupid's Bow and Arrow

Kit includes the following, items in red are not in your kit:

- ⇒ Craft sticks
- ⇒ Dental floss
- ⇒ Cotton swabs
- ⇒ Water
- ⇒ Pen or pencil
- ⇒ Nail clipper

### Directions

Soak the wooden sticks in a bowl of warm water for at least one hour. The warm water softens the sticks up enough so that they are bendable.

Remove the wooden sticks from the water and thoroughly dry them off with a paper towel.

Using a pen or pencil, draw small notch marks on both ends of the wooden stick. The easiest way to cut away the notch marks is with a pair of nail clippers. Carefully clip four notches into the wooden craft stick.

Gently form the wooden stick into a slight curve as shown in the photo. When you begin to tie the floss around the ends, the curve will increase.

Tightly wrap and tie floss around both ends of the wooden stick, as shown in the photo.

Decorate the outside of the bow with paper, stickers, or markers.

To make the arrows, cut the ends off one end of a cotton swab.



When you draw a real bow, you aren't actually stretching the string. Instead you are changing the shape of the bow, which gives potential energy to the bow. When the arrow is released the bow returns to its original shape. Due to this movement, the bow now possesses kinetic energy, which sends the arrow forward. The bow acts like a spring.

Potential energy is stored energy. Think of a rock sitting at the top of a hill. The rock is not moving, but it has the potential to roll down the hill. While the rock remains still it contains potential energy. Like the bow, whose shape had changed and is sitting still, waiting, before the release.

Kinetic energy is energy in motion. Once that rock starts rolling down the hill, it is in motion. This is kinetic energy. Much like when the arrow is released, the bow moves to return to its original shape. This motion causes the arrow to fly because of kinetic energy.