

BREWING UP SOME STEAM

CD SPINNING TOP

Materials You Will Need:

- an old CD or DVD
- bottle cap
- 1 marble
- glue
- heavier weight paper (like cardstock or oaktag)
- scissors (not included)
- crayons or markers

DIRECTIONS

Instructional video:
York Public Library YouTube Channel



1. Decorate your CD! Trace the CD on the paper. Cut it out and color it. Don't forget to cut out the little hole in the center. Make a cool design!

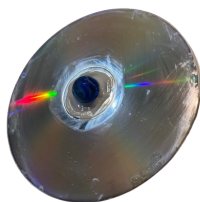


2) Glue the design onto your CD. This will need time to dry. While you are waiting, start in on your CD Button Whirligig!



3) Glue the bottle cap over the center hole on the same side of the CD as your design. This will take a good amount of glue. Don't worry- it will dry clear. Let it dry thoroughly!

CD Spinning Top (cont.)



4) Once the bottle cap has dried, flip the whole thing over and glue the marble into the hole on the other side. This will also take a good amount of glue and lots of drying time!

How to take this further:

Think about this:

How long can you get your top to spin for?

Does it spin when you turn it over?

Spin your top on different surfaces. How does this affect how long it spins?

How does the spinning make your designs look?

What else can you make a top out of?

What is happening?

When you spin a top, you are turning the top's stored energy (potential energy) into energy of motion (kinetic energy). The top eventually stops spinning because of friction and gravity. The surface below the top provides friction, which causes the top to slow down and start to wobble. When it begins to wobble, gravity starts to pull it over.