

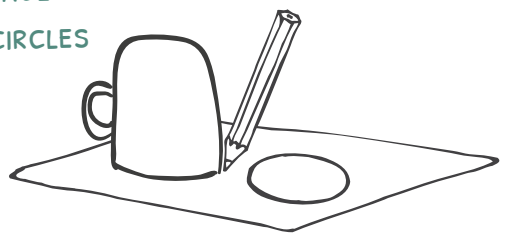
BUILD A THAUMATROPE



SUPPLIES

- A MUG OR GLASS
- GLUE STICK
- CARDSTOCK
- PENCIL
- SCISSORS
- COLORED PENCILS OR MARKERS

1 TRACE AROUND THE MUG TO TRACE TWO PERFECT CIRCLES

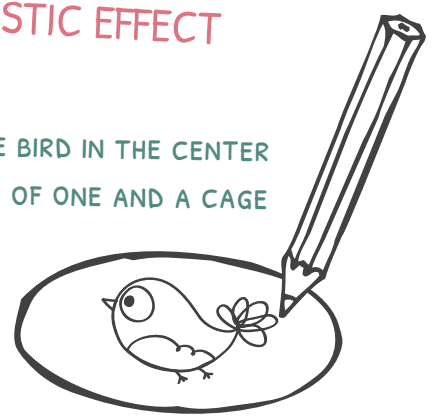


2 CUT THE CIRCLES OUT WITH THE SCISSORS

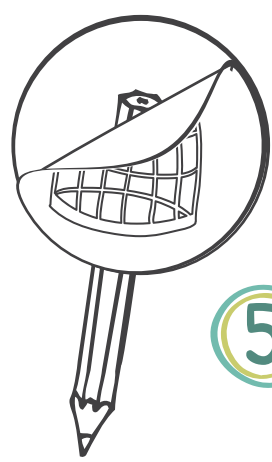


TIP: BE SURE TO DRAW THE CAGE LARGER THAN THE BIRD TO OBTAIN A MORE REALISTIC EFFECT

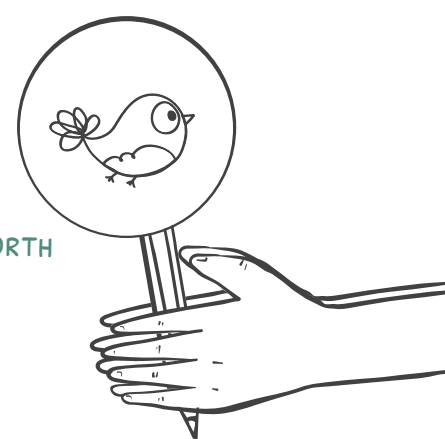
3 DRAW A LITTLE BIRD IN THE CENTER OF THE CIRCLE OF ONE AND A CAGE ON THE OTHER



4 GLUE THE TWO DISCS TOGETHER WITH THE PENCIL IN THE MIDDLE



5 HOLDING THE PENCIL BETWEEN YOUR TWO HANDS RUB THEM TOGETHER SO THAT THE DESIGNS FLIP BACK AND FORTH



WOW !!! THE LITTLE BIRD APPEARS TO BE INSIDE THE CAGE

WHAT'S HAPPENING ?

ANIMATED CARTOONS USE THIS SAME EFFECT: FLIPPING QUICKLY THROUGH A SERIES OF DRAWINGS CREATES THE ILLUSION OF MOTION

WHEN THE DISC TWIRLS BACK AND FORTH, OUR EYES AND BRAIN SUPERIMPOSE ONE IMAGE OVER THE OTHER LITERALLY STITCHING THEM TOGETHER INTO A SINGLE IMAGE.