



# WHIRLIGIGS

**SUPPLIES NEEDED: THICK CARDSTOCK, 3 FT OF STRING, MARKERS**

- **CUT OUT TWO IDENTICAL CIRCLES, THESE CAN RANGE IN DIAMETER FROM 1-6CM.**
- **DRAW A DESIGN ON ONE SIDE OF EACH CIRCLE, THIS CAN BE ANYTHING YOU'D LIKE.**
- **TAPE THE CIRCLES TOGETHER, DESIGNS FACING OUT, AND POKE TWO HOLES THROUGH THE CENTER OF THE CIRCLES, IT WILL LOOK LIKE A BUTTON.**
- **THREAD THE STRING THROUGH THE HOLES AND TIE THE ENDS TO CREATE A LOOP.**
- **HOLD ONE END OF THE LOOP IN EACH HAND, WITH THE CIRCLE IN THE MIDDLE, THEN SWING THE WHIRLIGIG AROUND IN A CIRCULAR MOTION TO WIND THE STRING. THEN MOVE YOUR HAND TOGETHER AND APART, WHICH WILL WIND AND UNWIND THE STRING CAUSING THE WHIRLIGIG TO SPIN FAST.**

**FUN  
FACT**

***A CENTRIFUGE IS A SCIENTIFIC TOOL THAT SPINS SO QUICK THAT IT CAN SEPARATE LIQUIDS BASED ON DENSITY, IT'S OFTEN USED FOR DISEASE DIAGNOSIS. THE PAPERFUGE IS A SIMPLE LOW-COST, NON-ELECTRICAL CENTRIFUGE, INSPIRED BY THE WHIRLIGIG AND DESIGNED BY STANFORD RESEARCHERS.***