

## 40. Cup, String and Dollar Bill

**Additional materials:** books, ruler, playing or index cards, two large drink/soda bottles (filled), tape, cup, string, cardstock or a crisp dollar bill

Let's see if we can balance the thin, curved edge of some coins on the thin rim of a cup or even a string!

Make a ruler bridge using stacks of books as supports as in the previous investigation (#39), except increase the height of the stacks. Attach the magnets as in investigation #39. Place a cup under the bridge.

Attach a 5p coin by its rim to the underside of the lower magnet. Then attach a 1p coin, 10p coin and 2p coin to the 5p coin. Grip the 2p coin with both hands and gently pull downwards until the 5p coin detaches from the magnet, with all coins remaining attached to each other. Place the 2p coin on the rim of the cup, with all coins still balanced on their rims.

