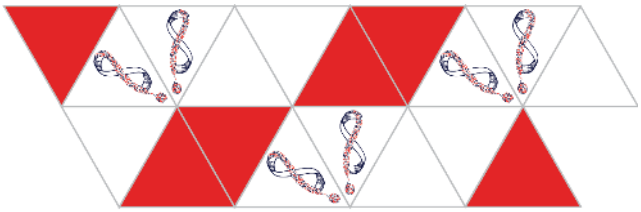
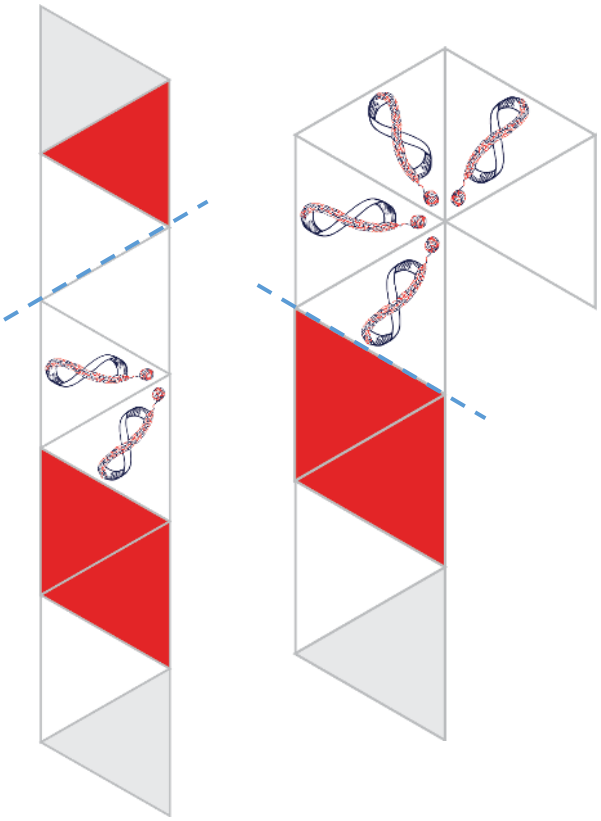
MATHS CRAFT new zealand

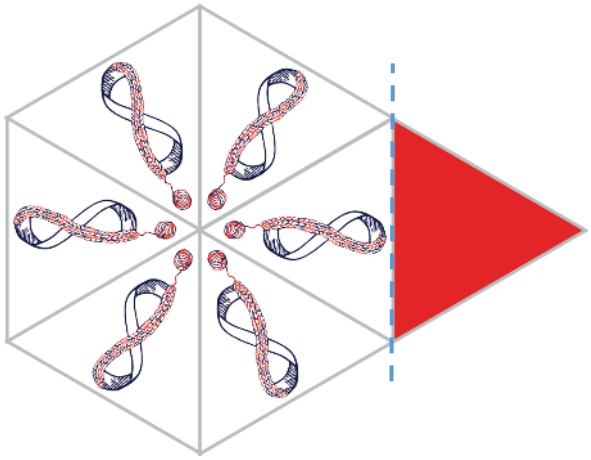
How to Fold a Trihexaflexagon

A **trihexaflexagon** is a folded paper polygon that appears to have two sides, but once flexed, turns out to have three. To make a trihexaflexagon, start by cutting out one of the templates provided separately (and shown below on the left). Pre-crease each line as precisely as possible. Then turn the paper over (as shown below on the right), fold in half lengthwise, and glue the top and bottom together.



You should now have the leftmost shape below (grey triangles indicate the underside). Fold the top of the strip down along the dotted line to obtain the shape in the centre diagram. Now fold the bottom of the strip up and behind the shape, along the dotted line. Tuck the right hand white triangle behind to obtain the shape in the rightmost diagram. Note that the ball of yarn in each logo is in the centre. Fold the red triangle to the back along the dotted line, turn the shape over, and glue the red triangle down (the back side of the trihexaflexagon should be entirely red).





Your flexagon is ready to flex! See the instruction sheet on how to flex a flexagon for more details.