IT PAYS TO SMILE

Next:
Materials and Explanations

Then:
Step-by-Step Photo Sequence
IT PAYS TO SMILE

Believe it or not, you can make George Washington’s face smile or frown on a dollar bill.

Materials
• Dollar bill

EXPERIMENT
The secret is in the way that you fold the dollar bill. Just follow these simple steps...
1. Start with George facing you. Make a “mountain” fold through the middle of George’s left eye. In origami terms, this means to fold the bill away from you.
2. Make a second mountain fold through the middle of his right eye. Make sure that these creases are sharp.
3. Make a “valley” fold between the two previous folds so that the crease is between George’s eyes and nose.
4. Pull on the ends of the bill slightly so that you can see his entire face, but making sure that the folds are still present.
5. Hold the portrait side of the bill in front of you with the face tilted upward. Notice how George Slowly begin to tilt the bill downward as if George was looking at the floor. Don’t take your eyes off George’s face because his smile will magically turn into a frown! Be ready for a chorus of oohs & ahhs to spontaneously erupt.

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HOW DOES IT WORK?
George's expression is all an optical illusion. The truth is that George's face never really changes from the way that it looks when the dollar bill is flat. When you fold the dollar, your brain and eyes perceive George to show expression, because of the perspective caused by the folds.
HERE IS WHAT YOU NEED

DOLLAR BILL
1. Make a mountain fold through the middle of George's left eye.

2. Make a second mountain fold through the middle of his right eye.
MAKE A VALLEY FOLD BETWEEN THE TWO PREVIOUS FOLDS
IT SHOULD LOOK LIKE THIS WHEN YOU ARE DONE.
SLOWLY TILT THE BILL TO MAKE THE FACE SMILE OR FROWN
WHY DOES THE FACE CHANGE DEPENDING ON THE ANGLE