# NEVER-ENDING ENOU CARD

#### WHAT IS ORIGAMI?

This never-ending card seems like a magic trick, but it actually uses paper engineering to make it work. The oldest form of paper engineering is called origami, the ancient art of paper folding. Paper was invented around 100 B.C. in China and brought to Japan in the sixth century A.D. by Buddhist monks. Origami began soon afterwards. The Japanese word origami comes from the word ori (to fold) and kami (paper).

Origami is the ultimate STEAM project as it uses both art and mathematics to create unique shapes. Never-ending cards use a series of overlapping squares and rectangles with strategically placed folds to make the motion possible.

#### SUPPLIES:

- Cardstock or paper
- Scissors
- Markers, crayons, or colored pencils (optional)
- Glue stick



inspiring young engineers, one craft at a time

### INSTRUCTIONS:

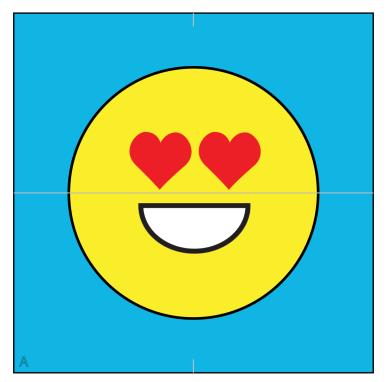
- 1. Cut out the never-ending emoji card template. If using the blank version, draw and color your own emoji designs inside the circles and color the background if desired.
- 2. Pick up Emoji Design A (as noted in the corner) and fold the left and right edges to the center hash mark (not the line that runs across the entire square). Open and cut down the line that runs across the entire square. Repeat with Emoji Design D. Then repeat with Emoji Designs B and C, except fold the top and bottom edges to the center hash mark. Then open and cut down the line that runs across the entire square. Set B, C, and D aside.
- 3. Lay the two pieces of Emoji Design A down on the table. Flip them over so the blank side faces up. Place glue in corners as shown in the purple squares in the picture 3 below.
- 4. Place the RIGHT side of Emoji Design B on the LEFT side of both pieces of Emoji Design A. Place the LEFT side of Emoji Design B on the RIGHT side of both pieces of Emoji Design A. Press tightly to seal the glue.
- 5. Flip open the card so that Emoji Design A is on the bottom. Apply glue on the sides as highlighted in purple in picture 5. Attach the left side of Emoji Design C on the left and the right side of Emoji Design C on the right. Press tightly to seal the glue.
- 6. Flip open the card so that Emoji Design C is on the bottom. Apply glue to the entire blank surface. Attach the top of Emoji Design D on the top and the bottom of Emoji Design D on the bottom. Press tightly to seal the glue.
- 7. Let card dry completely (at least 30 minutes) before playing with the card.

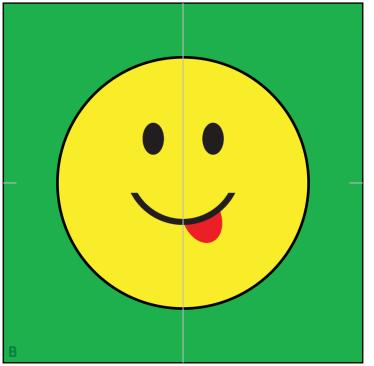


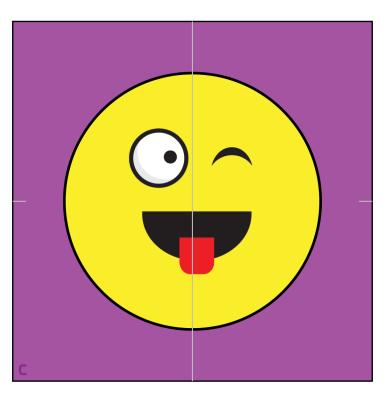
# NEVER-ENDING EMOJI CARD TEMPLETE

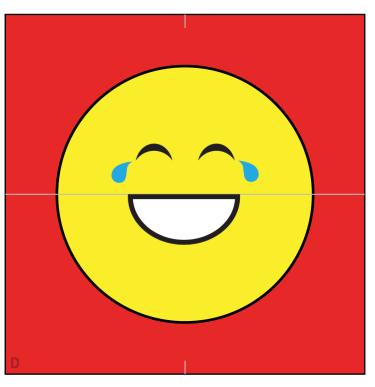
ENOJI DESIGN B

### ENOJI DESIGN A









ENOJI DESIGN D

ENOJI DESIGN G



# NEVER-ENDING EMOUI GARD TEMPLETE

### ENOJI DESIGN A

EMOJI DESIGN B

