

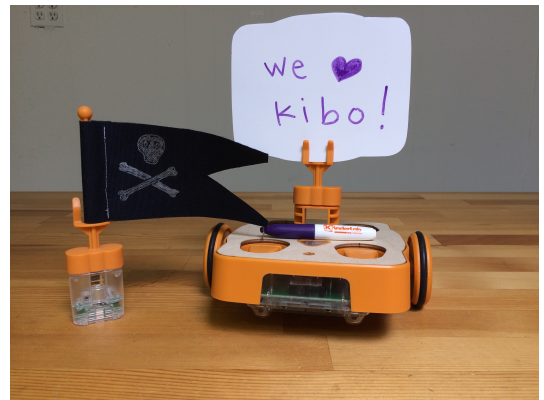
# KIBO Shape Search!

*Search for a favorite shape or letter in your room. A square, a circle? The first letter of your name? Imagine, create, and test a program to make KIBO draw your letter with an attached marker. Create a flag that shows your shape or letter and fly it from your KIBO's flagpole while your program runs! Students doing this activity should have prior experience programming KIBO with an understanding of KIBO movement commands.*



## Materials:

- KIBO-10 kit (minimum): KIBO body with motors, wheels, movement blocks, optional REPEAT w/number parameters
- KIBO Expression Module per kit
- KIBO Marker Extension Set per kit
- Large blank paper (3' x 3' per group), painter's tape
- Paper pre-cut into flag shapes



## Preparation:

- Tape the paper to table or floor surface. Each group should have appx 3 feet by 3 feet surface to work on.
- Decide whether to focus the lesson on shape recognition, letter recognition, or both.

## Activity (individual or group work):

1. Each group should search the room for a favorite shape (or letter).
2. Each group should draw their shape (or letter) in their workbook.
3. Provide the pre-cut flags. Each group should create a flag for their Expression Module flagpole which includes their shape (or letter). Provide tape for students to attach their flag to flagpole.
4. Each group should develop a program to make KIBO draw the shape (or letter) they have chosen, using the Marker Extension Set. Encourage students to test and improve the program! If students have experience with the REPEAT command, encourage them to use this when creating regular shapes.
5. Share all robots, flags, and drawings in a Technology Circle.

## Pre-K math standards addressed (if using shapes):

- Identify and describe shapes (squares, circles, triangles, rectangles)
- Analyze, compare, create, and compose shapes

## Pre-K literacy standards addressed: (if using letters):

- Identify and recognize letters of the alphabet
- Print upper case letters