

## YOU WILL NEED:

### Pegboards:

- 3 Large squares
- Large circle
- Small hexagon

### Other:

- Stem clipper
- Scissors
- Clear tape

### Bead Colors:

- Green - 280
- Parrot Green - 576
- Light Blue - 174
- Dark Blue - 109
- Pearl Silver - 112
- Prickly Pear Pearl Stripe - 207
- Royal Blue Pearl Stripe - 6

### Stem Colors:

- Light Blue - 1
- Purple - 1
- Magenta Stripe - 1
- Grape Stripe - 2
- Cucumber Stripe - 1

## Instructions

1. This design uses a colorful combination of beads and stems cut to size. Use the stem clipper to cut the stems to the indicated size. Use the chart below as a size reference for the pieces you will need.
2. To create the robot's rotors, place both beads and stems **BETWEEN THE PEGS** on the pegboard as shown. For the rest of the robot's body, place the beads on the pegs as usual. If you are using a clear pegboard, slide the actual-size pattern underneath it.
3. To create the long strip part of the robot, connect 3 large pegboards as indicated.
4. Ask an adult to fuse your designs—see page 2 for further instructions. For assembly, see page 6.

## CUT YOUR BEAD STEM PIECES

Cut 8 pieces of the Light Blue stem to 20mm



Cut 4 pieces of the Purple stem to 30mm



Cut 4 pieces of the Cucumber Stripe stem to 50mm



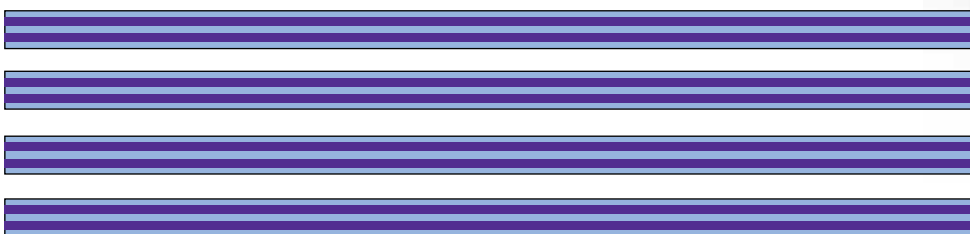
Cut 2 pieces of the Magenta Stripe stem to 60mm

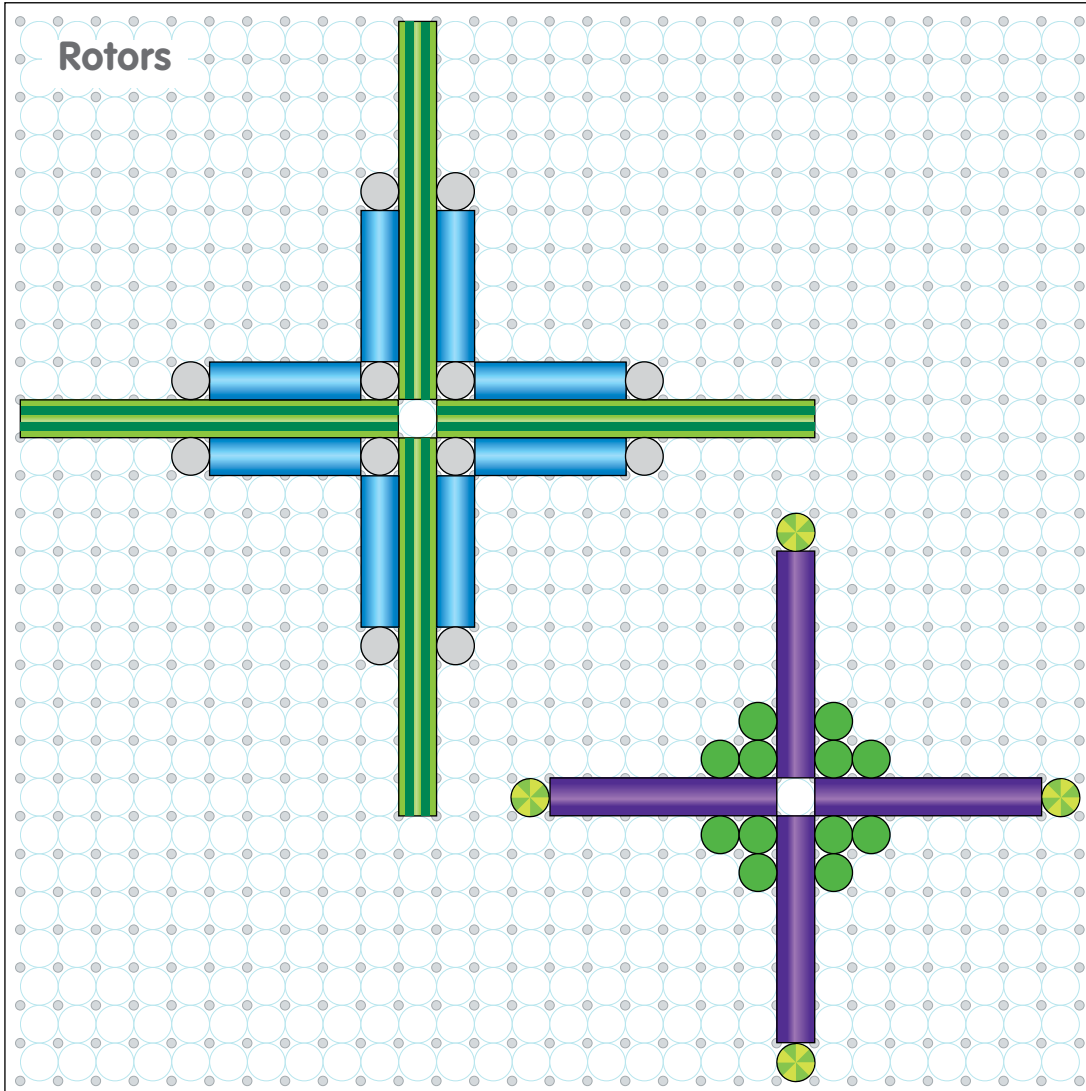


Cut 1 piece of the Magenta Stripe stem to 85mm (3.25")



Cut 2 Grape Stripe stems in half





### Bead Colors:

- Green
- Pearl Silver
- Prickly Pear Pearl Stripe
- Light Blue - 20mm
- Purple - 30mm
- Cucumber Stripe - 50mm

### Helpful Tips to Fuse the Rotors

- The stems stand a little taller than the beads and will fuse first and begin to flatten—this is normal. The back of the piece should be well-fused but not squashed, and the beads should still have an opening in the center.
- Rotors should be fused on **ONE SIDE ONLY**

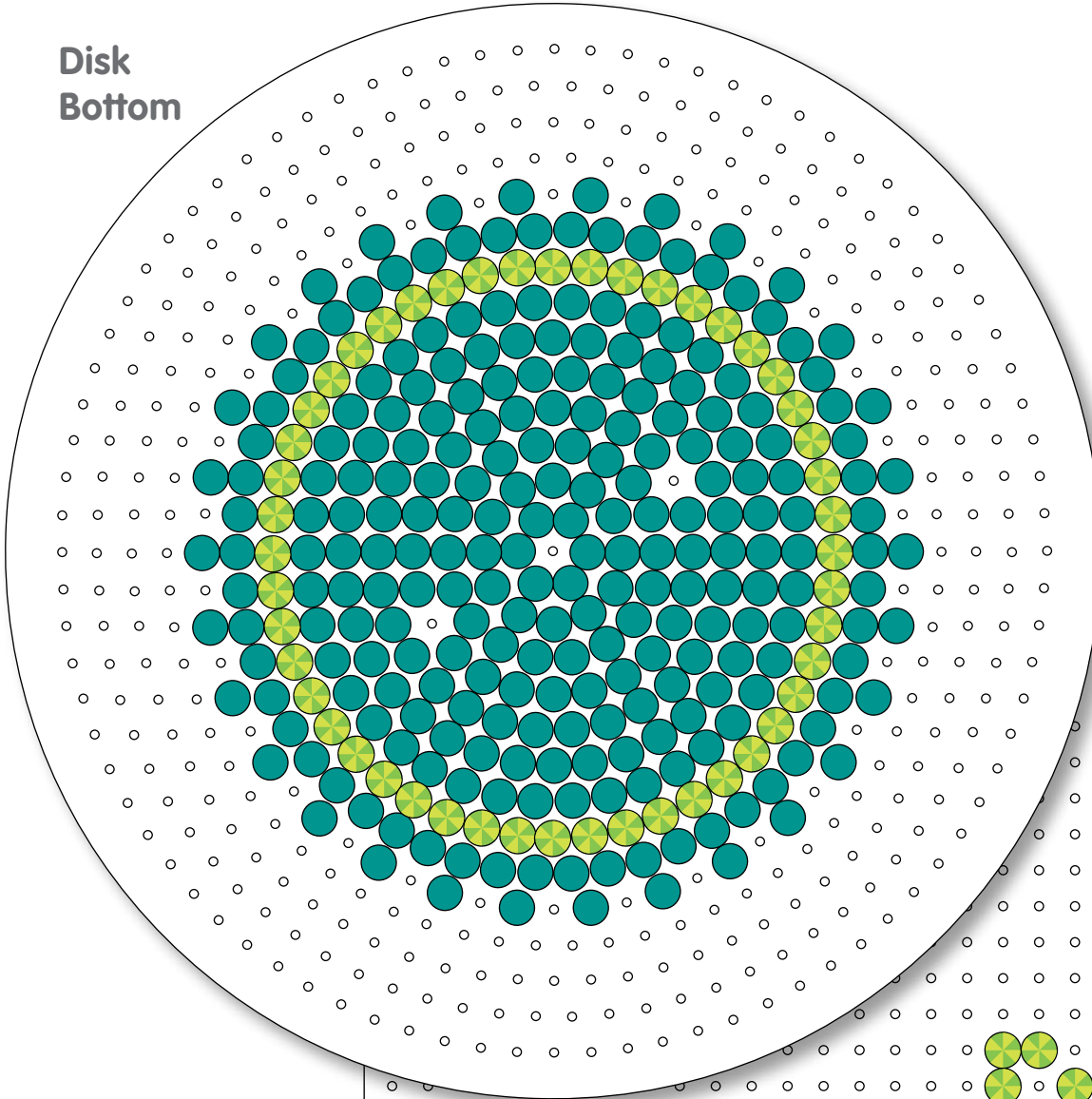
### Fusing Instructions—Only Adults Iron



1. Place your pegboard on a flat, heat-safe surface.
2. Set a household iron to the medium setting. Place ironing paper over the pegboard. Press the iron gently for 5-10 seconds, then in a circular motion begin to iron the project. As the beads begin to fuse, you will see circles of the beads start to show through the paper. When ironed properly, the beads will still have an open center. Let the design cool. For the rotors and long body strip, STOP HERE.
3. Remove the paper and bead design from the pegboard. Flip the design over to expose the non-fused side. Repeat step two. Let cool completely.

**NOTE:** Beads need heat for about 10-20 seconds per side to fuse evenly. Lift the paper occasionally to see how the beads are fusing. Depending on the size of the project, additional heating time may be required. **DO NOT OVER-IRON** the beads as it will make the centers of the beads close and can make the assembly you do with your project more challenging.

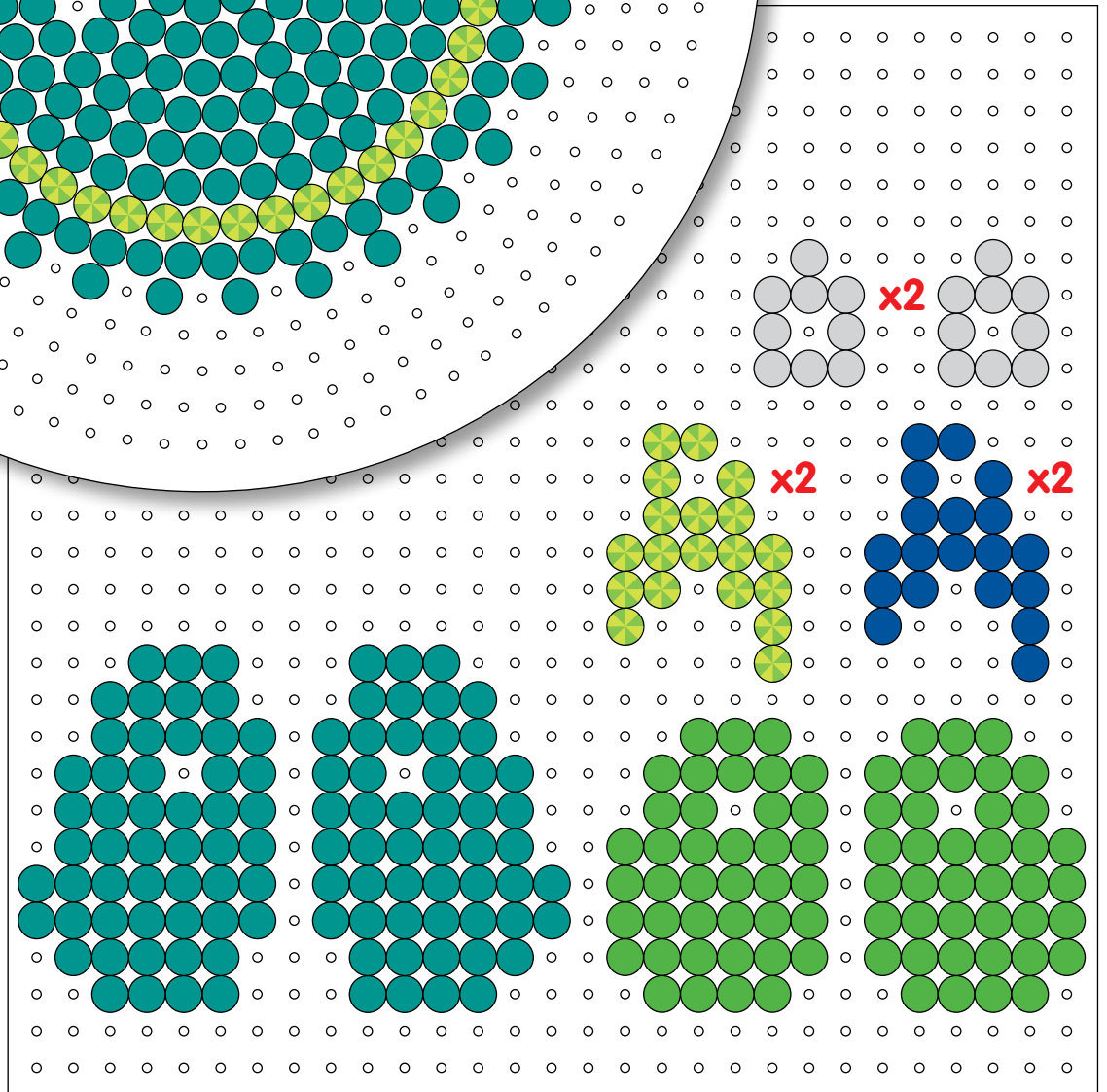
Disk  
Bottom



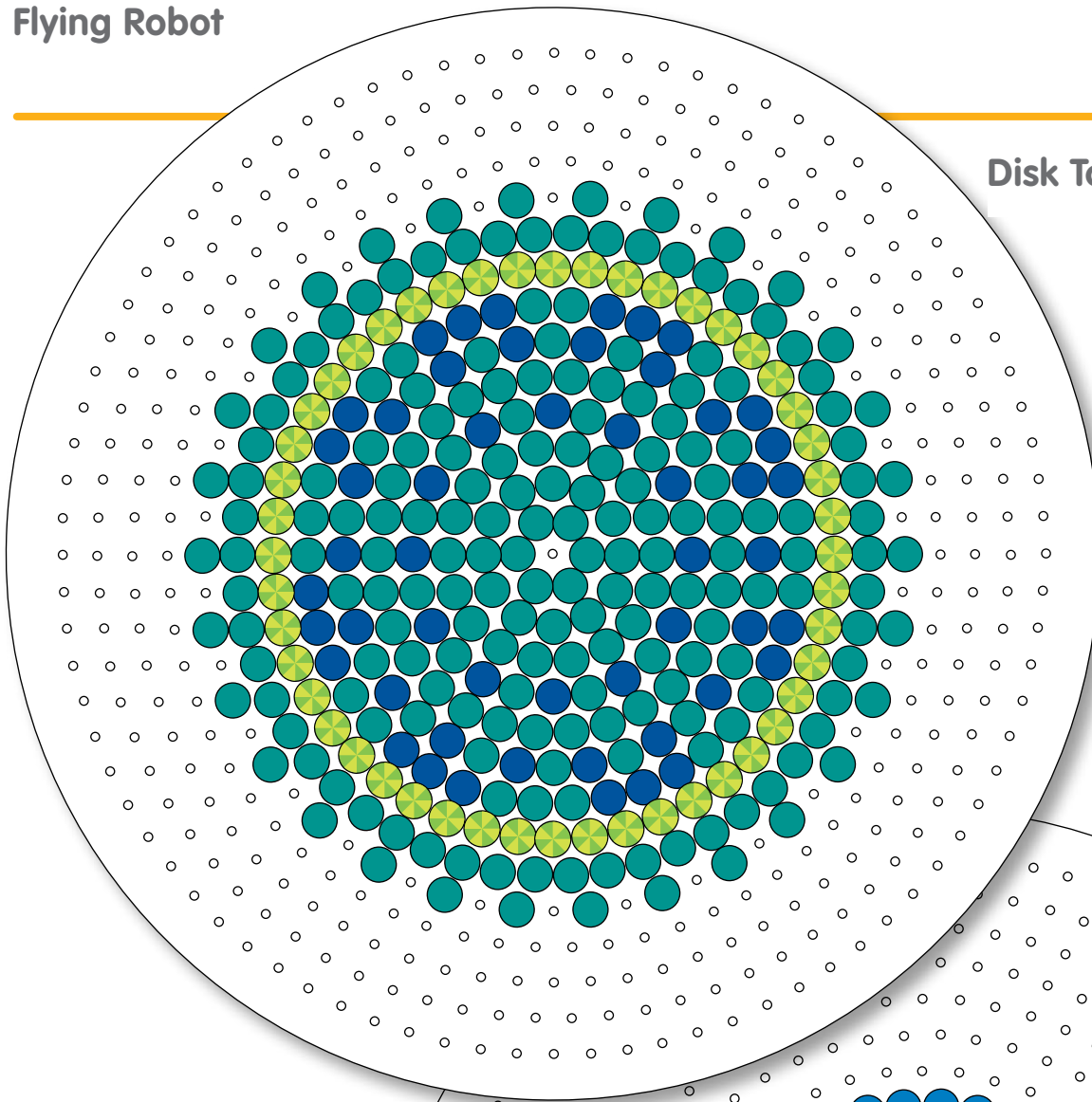
Bead Colors:

- Green
- Parrot Green
- Dark Blue
- Pearl Silver
- Prickly Pear Pearl Stripe

Hands &  
Feet

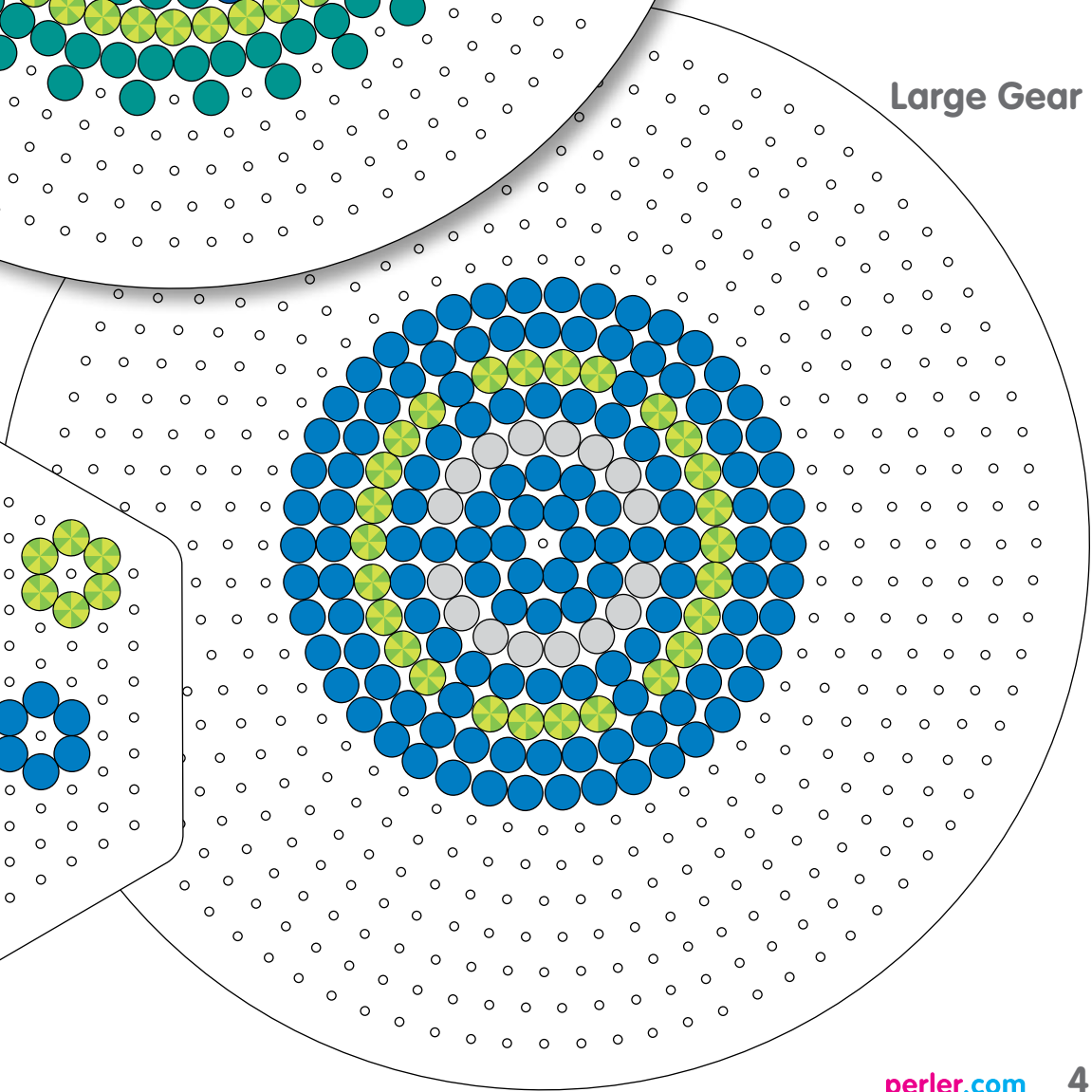


Disk Top

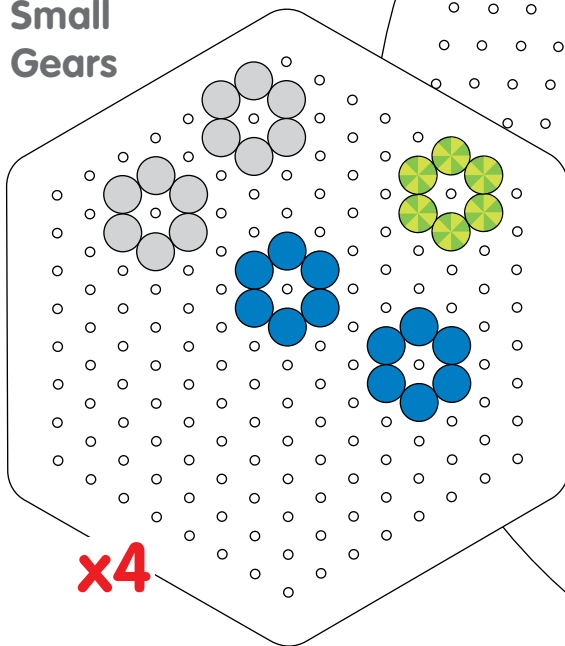


- Bead Colors:**
- Parrot Green
  - Light Blue
  - Dark Blue
  - Pearl Silver
  - Prickly Pear Pearl Stripe

Large Gear

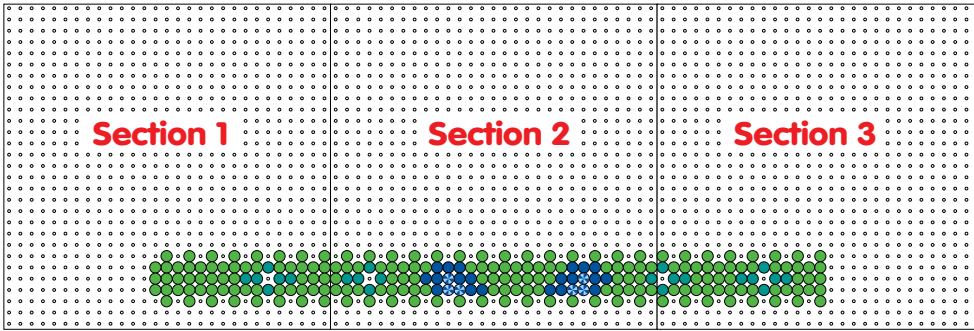


Small Gears



x4

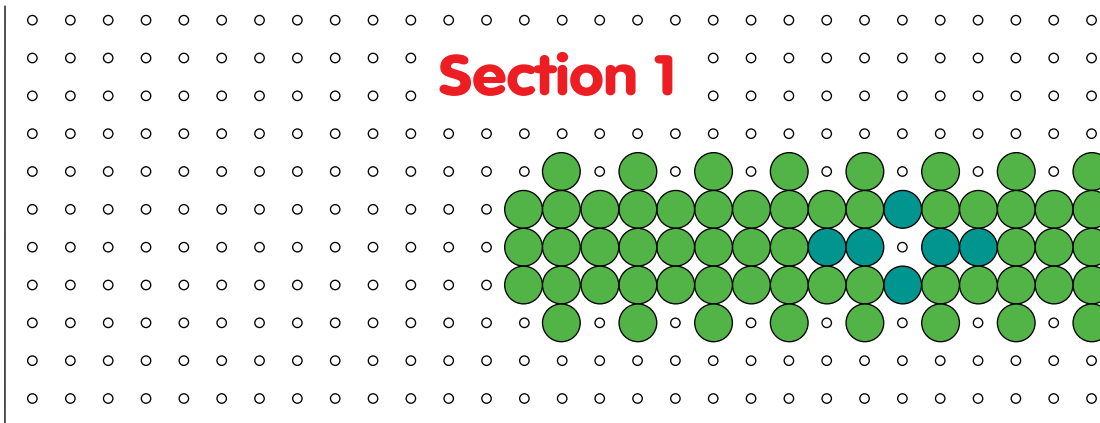




**Body Strip**

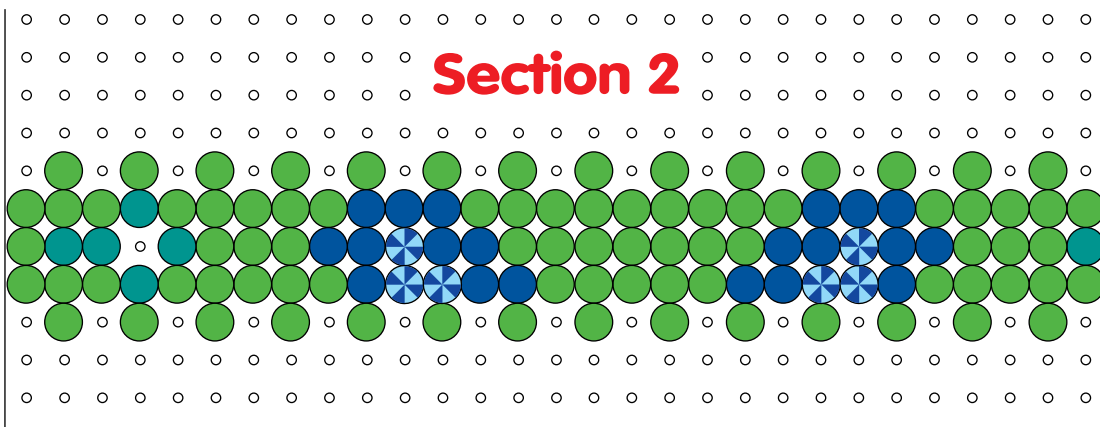
Assemble the three large pegboards as shown at left.

Cut apart the pattern sections and tape together in the same way.

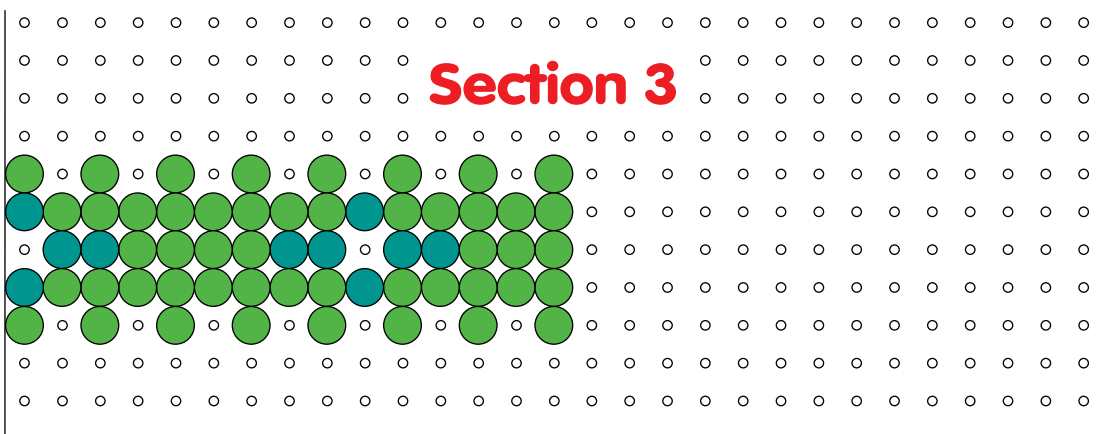


**Bead Colors:**

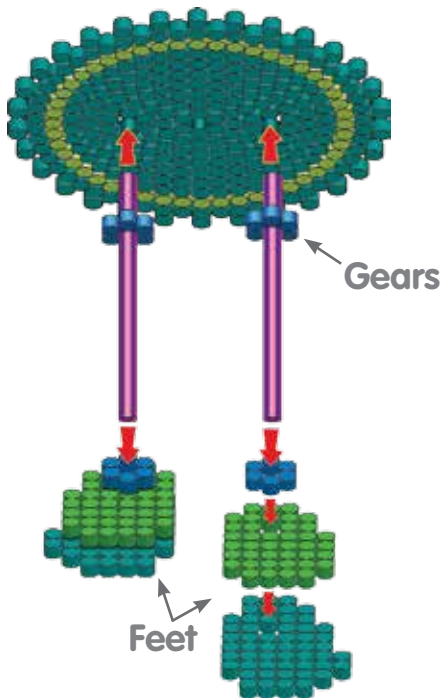
- Parrot Green
- Light Blue
- Dark Blue
- Royal Blue Pearl Stripe



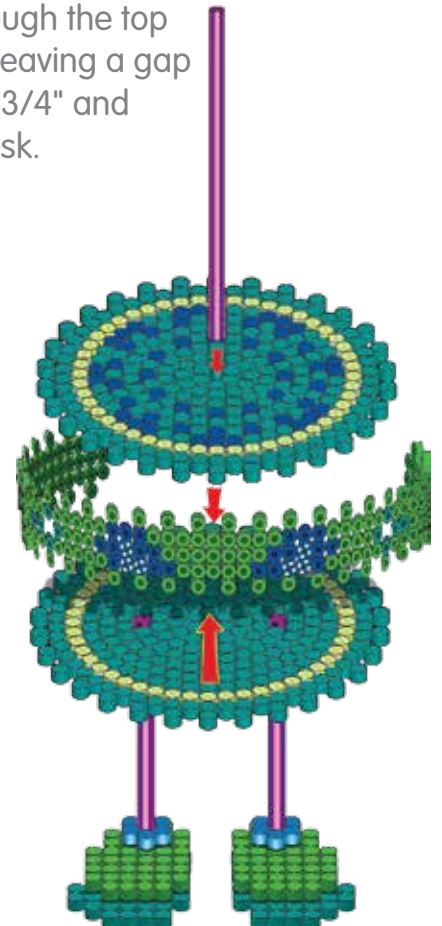
The Body Strip should be fused on **ONE SIDE ONLY**.



**1** Create the legs by inserting two 60mm magenta stripe stems through the stacked foot pieces and small blue gears. Then, insert the legs through the openings in the bottom disk of the robot, making sure the upper gears touch the disk.

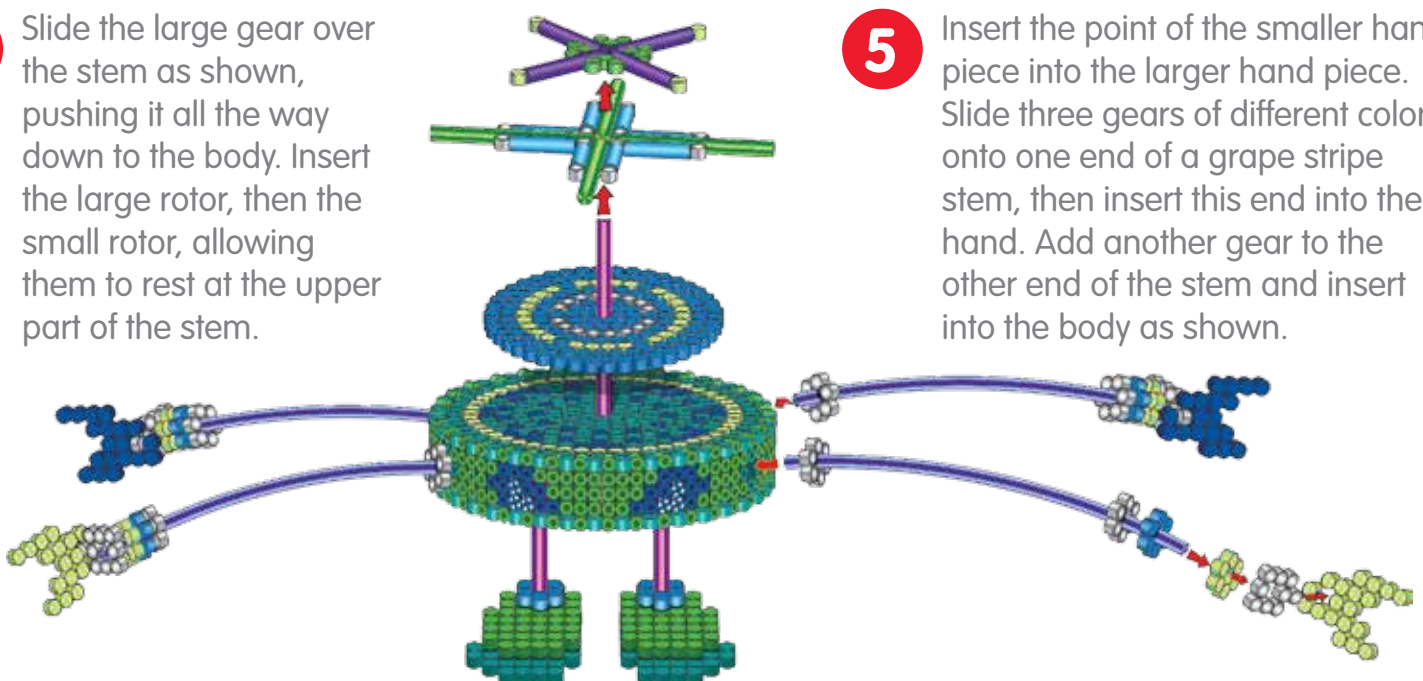


**2** Assemble the body by inserting the 3 1/4" magenta stripe stem through the top disk and bottom disk, leaving a gap between the pieces of 3/4" and 2 1/4" above the top disk.



**3** Position the long body strip between the two disks placing the eyes at center front. Gently press the disks and body strip together, working from the eyes toward the back of the body.

**4** Slide the large gear over the stem as shown, pushing it all the way down to the body. Insert the large rotor, then the small rotor, allowing them to rest at the upper part of the stem.



**5** Insert the point of the smaller hand piece into the larger hand piece. Slide three gears of different colors onto one end of a grape stripe stem, then insert this end into the hand. Add another gear to the other end of the stem and insert into the body as shown.