The Challenge: Design an Electromagnet Crane to sort as many materials in 2 minutes as possible.

Redesign your crane to reach all of the sorting areas. The example crane will not work.

Add parts to your crane to help you move non-magnetic materials.

Move materials from the pile in the center, to the correct sorting areas.
Single Player Arena
**Super Sort Engineering Challenge**

**Single Player**

Design and build an electromagnetic crane to sort as many materials in 2 minutes as possible.

Criteria (rules):

1. Only the crane arm may enter the sorting area during the challenge. It may not be lifted up.
2. Crane may not use sharp points to pick up materials.
3. Crane base must stay inside this rectangle. It may not be lifted up.
4. Magnetic materials may only be moved by electromagnet.
5. All materials must start in the center circle.

The example electromagnet crane arm will not reach all of the sorting areas. You need to redesign the arm so that it will.

Scoring Points:

+2 Add 2 points for every magnetic material properly sorted.

+1 Add 1 point for every non-magnetic material properly sorted.

-2 Subtract 2 points for every material in the wrong recycling area.

Use with TeacherGeek Electromagnet Crane Activity: SKU 1824-71 (single) or SKU 1824-61 (10 pack)
Sort Pile

Place all materials here to start.
Two Player Arena
TEAM #2

Criteria (rules):
1. Only the crane arm may enter the sorting area during the challenge.
2. Crane base must stay inside this rectangle. It may not be lifted up.
3. Crane may not use sharp points to pick up materials.
4. Magnetic materials may only be moved by electromagnet.
5. All materials must start in the center circle.
6. Only TeacherGeek, recycled, and approved materials may be used.

The example electromagnet crane arm will not reach all of the sorting areas. You need to redesign the arm so that it will.

Scoring Points:
- +2 points for every magnetic material properly sorted.
- +1 point for every non-magnetic material supplied.
- -1 point for every non-magnetic material supplied.
Super Sort Engineering Challenge

2 Player

Design and build an electromagnetic crane to sort as many materials in 2 minutes as possible. Compete against another crane for the most points.

Criteria (rules):

1. Only the crane arm may enter the sorting area during the challenge.
2. Crane base must stay inside this rectangle. It may not be lifted up.
3. Crane may not use sharp points to pick up materials.
4. Magnetic materials may only be moved by electromagnet.
5. Only TeacherGeek, recycled, and approved materials may be used.

Scoring Points:

+2 Add 2 points for every magnetic material properly sorted.
+1 Add 1 point for every non-magnetic material properly sorted.
Sort Pile
Place all materials here to start.

Magnet Crane Activity:
1 ea (10 pack)