

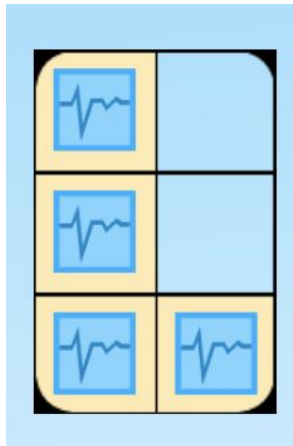


FRACTION ROBOT GAME MAT

Place the game mats in plastic sleeves or laminate them so students can use dry erase markers on them and be able to use the mat multiple times.

Fraction Robot Game Mat-01, 03 (GR. 4-5)

- Give students a Fraction Robot Game Mat and dry erase marker and connecting centimeter cubes (optional).
- Tell students that the Robot Factory builds robots with different sized parts. All parts must fit within the lines and cannot overlap.
- Have students determine the different size parts that can be used to build these robots. (i.e., $\frac{1}{6}$, $\frac{1}{3}$, $\frac{1}{2}$ and 1 whole or any combination of smaller parts such as $\frac{4}{6}$, $\frac{2}{3}$)
- Have students work together to find all of the combinations of parts that can build 1 whole robot. They can mix or match part sizes. Record the different expressions that represent the whole robots.
- Tell students that not all robots from this factory are a complete whole robot. (see example)



- Give students different fractions of parts they have to build robots. They use the mats to build the robots and determine how many robots they make with the parts they are given. (eg., $\frac{1}{3}$ LED lights and $\frac{1}{2}$ gizmos)
- Have students create and share stories. Students should represent the story on their mats and write an equation to show how many robots are built.

Fraction Robot Game Mat-02, 04 (GR. 4-5)

- Give students a Fraction Robot Game Mat-02 and dry erase marker and connecting centimeter cubes (optional).
- Tell stories or give students fractions to represent on their mats and write equations to find the solution.
- Be sure to include some stories that involve subtraction.