

IT Girls Robot Crawler

BERKELEY LAKE ELEMENTARY



IT Girls

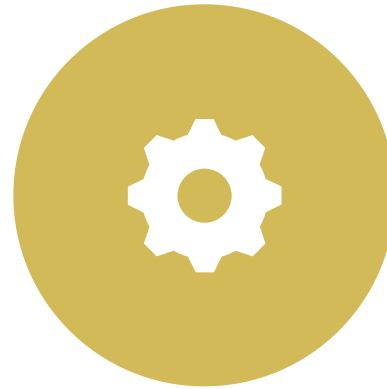
INSPIRING GIRLS TO PURSUE THEIR PASSIONS

Scientific idea's that drive our robot



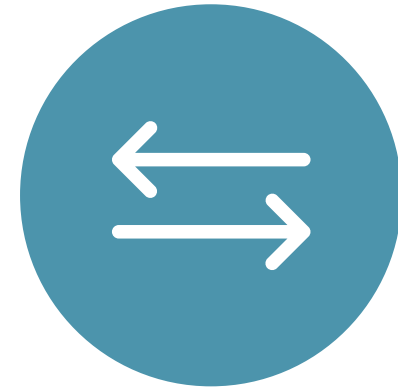
ELECTRICAL ENERGY

The ability of Electricity to do work.



MECHANICAL ENERGY

The energy an object has while it's moving

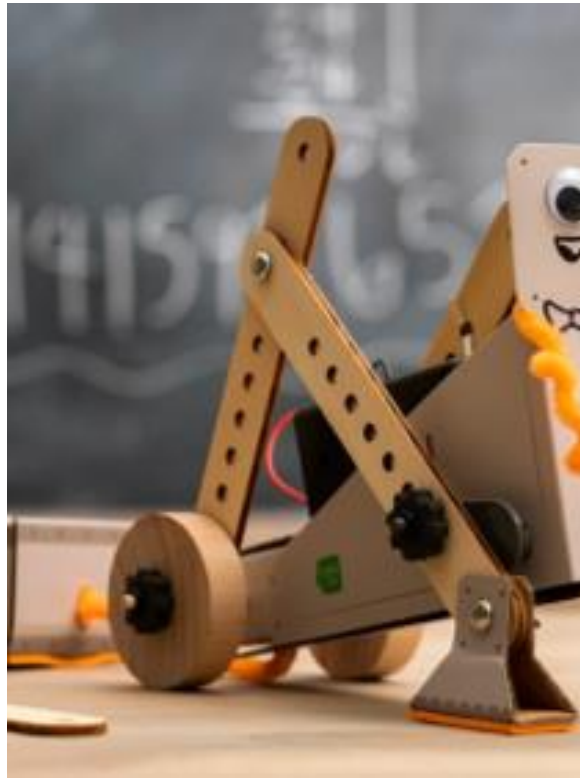


FRICTION

A force that can slow down or stop slipping and sliding when two surfaces rub against each other.

CONCEPTS REINFORCED

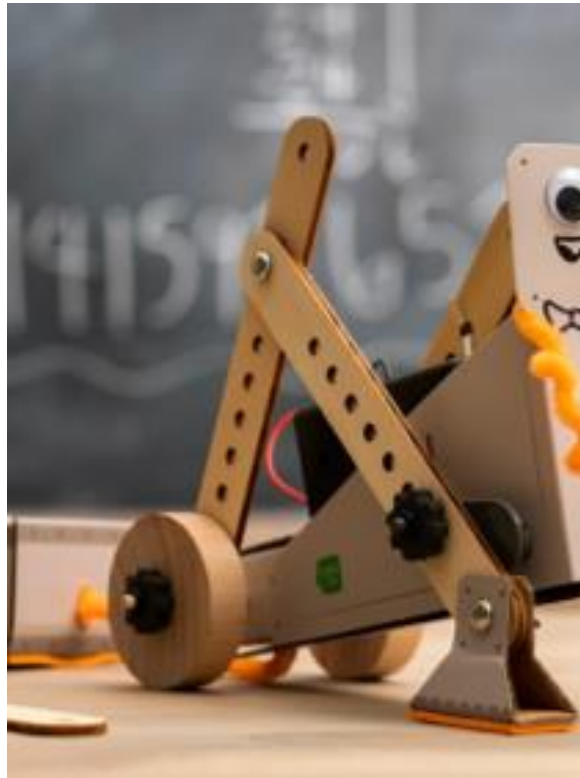
What powers
the robot
crawler?



What happens when
you connect the wires
between the batter
pack and motor?

CONCEPTS REINFORCED

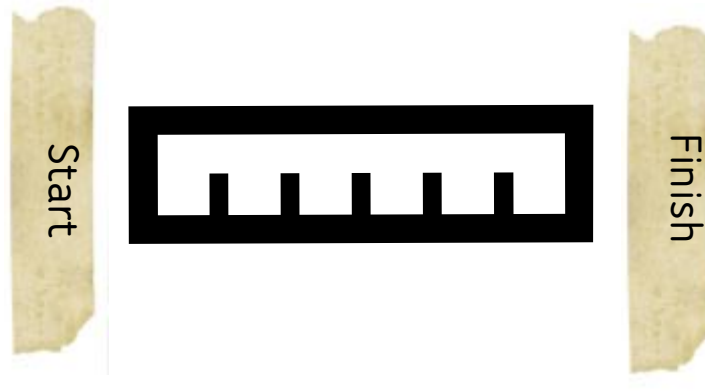
Why do you think each robot's leg has two pieces?



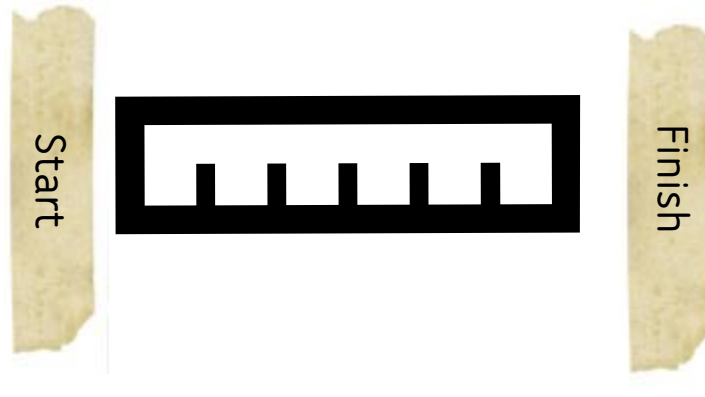
What are other examples of linkage?

EXPLORING SPEED & TIME

Each person record the time of their robot to see how long it takes from start to finish.



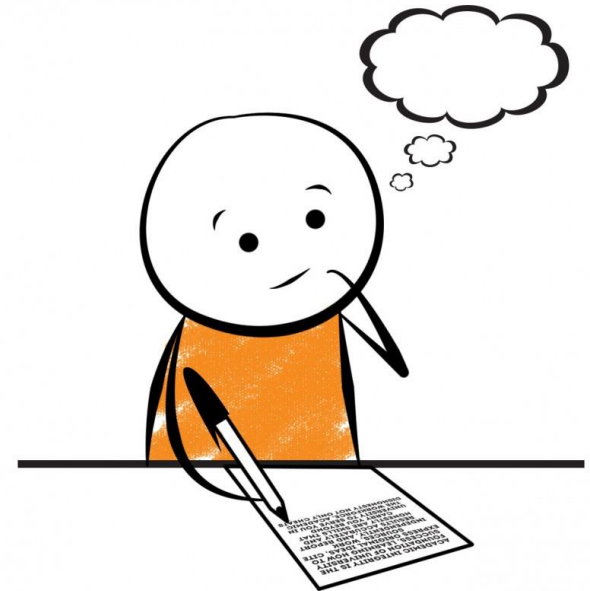
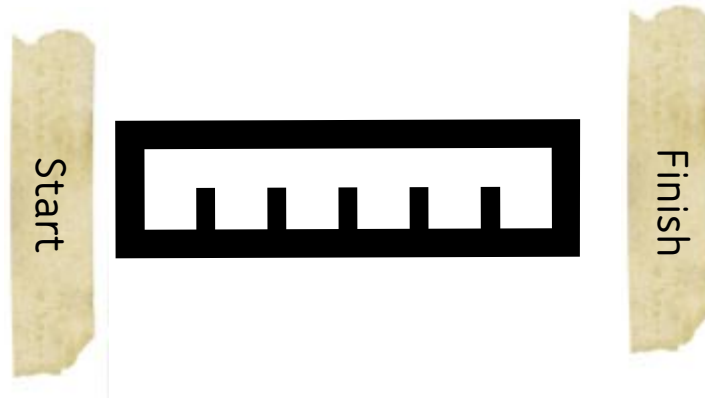
1. Take off the gear, leg and small crank
2. Attach the larger crank and press onto the motor shaft
3. Put the leg back on the crank then the ear. Then repeat for the other leg
4. What do you think will happen?
5. Race your robot again



EXPLORING SPEED & TIME

EXPLORING SPEED & TIME

1. You decide and change the variables of the robot structure
2. Predict what will happen
3. Record your results.



NEXT TIME

- Create a presentation (1-2 minutes) about your robot**
 - The concepts you learned about**
 - What you learned about creating a robot**
 - Make it creative and fun!**
 - Be ready to present to the class next week**