

## Build-a-Toy Workshop

**Problem:** Children of families who had to evacuate their homes because of a wildfire no longer have any toys. We need to engineer some new toys for them!

Constraints: You only have \$80 to use to help engineer new toys for the kids.

Material Costs:

Electric Motor	\$20
Battery	\$10
Wire (12")	\$2
Popsicle Stick	\$2
Straw	\$2
Axle	\$5
Wheel	\$5
Gear	\$5
Rubber Band	\$1
Paper Clip	\$1
Masking Tape (12")	\$1
Note Card	\$5
Magnet	\$3

**Imagine:** List ALL of the ideas your group has for new and creative toys.

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

**Design:** Draw your design. Make sure each of the different parts is labeled.

**Build:** List how much of each material you will need to build your toy. Multiply the amount you need by the cost of the material and then add all of the amounts together. How much is the total cost of your toy?

Item	# needed	Price	Cost
Electric Motor		\$20	
Battery		\$10	
Wire (12")		\$2	
Popsicle Stick		\$2	
Straw		\$2	
Axle		\$5	
Wheel		\$5	
Gear		\$5	
Rubber Band		\$1	
Paper Clip		\$1	
Masking Tape (12")		\$1	
Note Card		\$5	
Magnet		\$3	
Total Cost			

**Test:** Describe how well your toy worked when you tested it. What are two things you can change about your toy to make it work better?