What evidence can you acquire that will help you explain what a black box looks like inside?
Can you build a physical model of a black box that behaves the same way?
Can you draw a model that explains how a drought stopper works?
Can you make a model that hums when you pull the string and dings when you let go?
How can you improve your model?
Can you replicate the original hum dinger?
Can you design a go-cart that can roll down a ramp and across the floor a short distance?
Can you modify your go-cart so that it will travel 2 m on level ground without an external push or pull?
What factors go into the design of a self-powered go-cart that can travel 2 m?
Can you design a cart that can turn a corner as well as travel 2 m?
How can you modify your cart to perform additional tricks?
What other models can you design?