

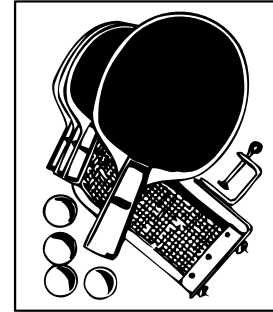
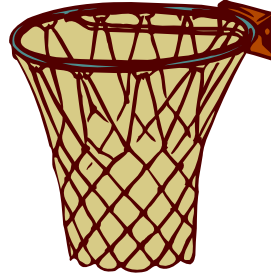
Ping Pong Basketball

Creative Design Challenge

Situation

Many times when an engineer designs a product they are concerned with factors such as speed, accuracy, and durability.

Design and make a device that will launch a ping pong ball into a target from a distance of ten feet away.



Resources

Time	2 class periods
People	Groups of up to three people
Energy	Human energy only for activation of the device
Information	Simple machines and mechanisms
Money	None
Tools	Scissors, x-acto saws, glue
Materials	Dowel rods, drinking straws, craft sticks, string, paper clips, rubber bands
Space	The device must not occupy space greater than one cubic foot

Other Criteria

- The device must be triggered by the touch of a finger.
- The device must be able to be “reset” within thirty seconds after the last launch and must be durable.
- You must complete a detailed drawing (include dimensions and materials) before you receive materials to construct your device.
- The device that scores the most points wins. One point for each “basket.” Each group will get five shots. Ties broken in sudden death style.
- Follow the design loop process!