# Taking Time for Teamwork

# **Launching Projectiles**

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#### **ELE90/107004**

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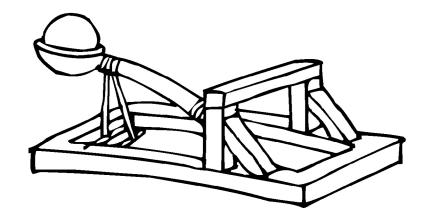
# **The Great Ping-Pong Catapult**

## **Challenge**

Build a catapult that will propel a ping-pong ball onto a target.

# **Supplies**

- 1 piece of wood for the base
- 1 ping-pong ball
- 4 popsicle sticks
- 3 paper clips
- 1 plastic spoon
- 2 small plastic cups
- 4 thumbtacks
- 4 rubber bands
- 50 cm of tape
- target



# **Requirements**

- 1. At least five different supplies must be used.
- 2. The contraption must be completed within the time limit.

# **Testing and Scoring**

**Group goal** – Each group should create a working catapult.

- Students may not touch the ping-pong ball during the launch. Students can place the ping-pong balls into the contraption, but they can't do anything else.
- The contraption must be placed on the table and stay there during launch.
- Where the ping-pong ball first hits will be where it is scored.

**Scoring** – Each catapult will get three launches to earn as many points as possible.

#### **Teacher Notes**

- Goggles are recommended for safety.
- You can make the target on the wall or on the floor.
- You may have multiple targets worth more points.
- At the end of the activity, have students salvage as many of the unused or unbroken supplies as possible for use in other classes or for other activities.

# **Jellybean Throw**

# Challenge

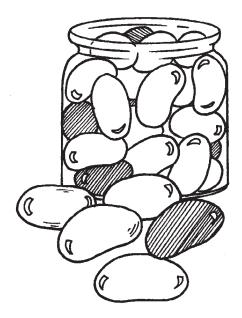
Build a contraption to accurately launch as many jellybeans as possible through a target.

# **Supplies**

- 5 jellybeans
- 1 clothes pin
- 1 sheet of paper
- 1 plastic spoon
- 5 paper clips
- 40 cm of tape
- 10 popsicle sticks
- target with a coffee can-sized hole cut out of it

## **Requirements**

- 1. At least five different supplies must be used.
- 2. The contraption must be completed within the time limit.



## **Testing and Scoring**

**Group goal** – Each group must accurately launch at least one jellybean with the catapult.

- Students may not touch the jellybeans during the launch. Students can place the jellybeans into the contraption, but they can't do anything else.
- The contraption must be placed on the table and stay there during launch.
- If a jellybean hits the paper and bounces through the hole, it counts as a successful launch.

Scoring – The contraption that successfully launches the most jellybeans into the target will be declared the winner.

#### **Teacher Notes**

- · Goggles are recommended for safety.
- This activity is great after holidays when jellybeans can be purchased inexpensively.
- You can determine if there is a time limit for the launching or if you want to give unlimited time to get as many of the five jellybeans through the hole as possible.
- Jellybeans can be reused or eaten depending on your school's nutrition requirements
- At the end of the activity, have students salvage as many of the unused or unbroken supplies as possible for use in other classes or for other activities.