Challenges

The catapult must include a gauge that can be used to precisely launch balls to close and long distances by using simple materials.

Group name: Om El-abtal School Team

Time : 10 minutes

Tools : 10 craft sticks, 5 rubber bands, 1 plastic spoon Ping Pong ball

Activity Design

STEM

Year : 6 primary

Date: 26/2/2018

Activity Title: Build a Catapult

Subjects

Science

SIXTH PRIMARY

SECOND TERM

Unit one force & motion

Evaluation

Assessment

Concept Items

Levers

Types of levers

Law of levers

Teachers

H U Team

Objectives

Identify the basic elements of a lever.
Define the importance of a lever in our daily life.
Design a custom lever to solve a problem
Measure the distance.
Understand the difference among first, second, and third class levers.

EU Team

Activity Steps

- Take 8 sticks and tie a rubber band tightly around one end.
- Tie another rubber band tightly around the opposite end so all 8 sticks are bound together.
- Take the remaining 2 sticks and tie a rubber band on one of the ends. Try to tie the band close to the edge of the sticks.

The catapult must feature a lever that creates mechanical advantage.
The catapult must be structurally strong and aesthetically appealing.

Challenges

Year 4th primary **Date 26-2-2018**

Lesson Energy forms & transformation .

Activity Name

Balloon-Powered Car Challenge

Aim

To know the importance of air pressure & Newton s 3rd law of motion in our daily life.

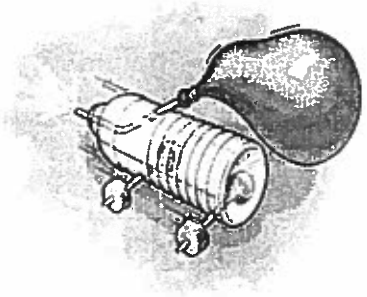
Objectives

1. Understand the following concepts , air pressure, Newton s 3rd law of motion.
2. Differentiate between , kinetic energy & potential energy .

Challenges

- The car should be strong and not fall apart when in use.
- The car should go straight.
- The car should go as far as possible.

Activity Design



Time /Tools / Groups

10 minutes

Plastic Straws , Wood sticks , Glue gun , popsicle sticks , Toy wheels , balloon , Rubber band

Small groups each group contain 5 members

Activity Steps

1. Tie the wooden sticks to the straw, then tie popsicle sticks.
2. Put the car wheels.
3. Connect the straw to the balloon , stick it to the car.
4. Blow the balloon to test the car to go as far as possible .