

# Science Projects Ideas!



# Tesla Coil

- You need a walk-in tent or dark area

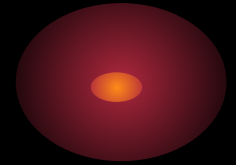
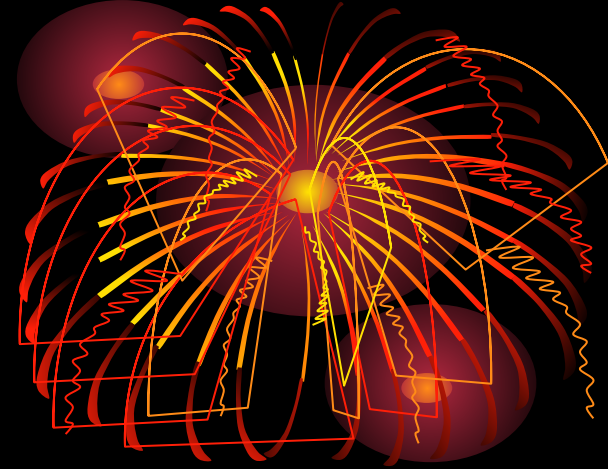


# Van de Graaf Generator

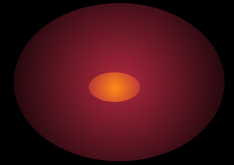
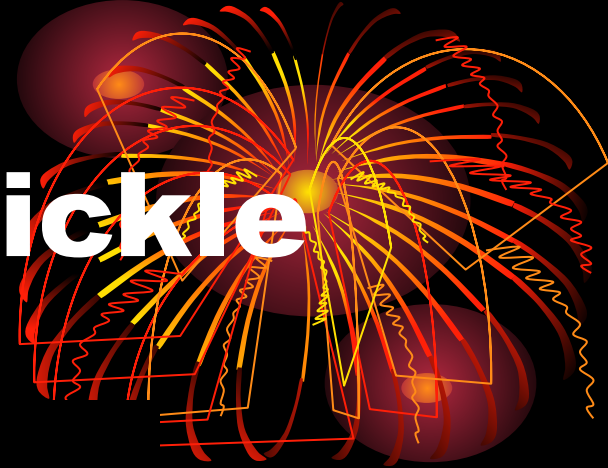




# Electrical / Circuits Ball



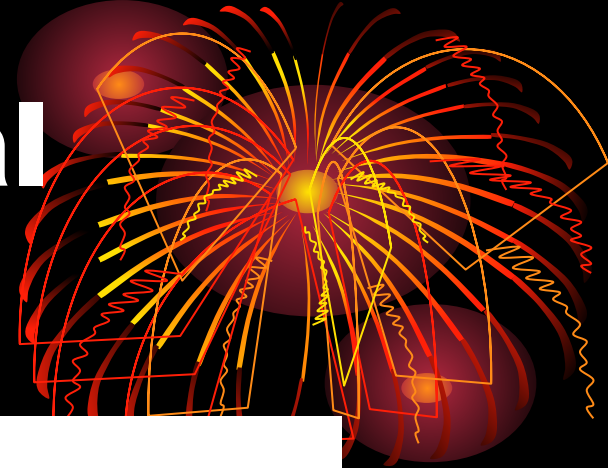
# Plasma Ball and pickle



# Magnets

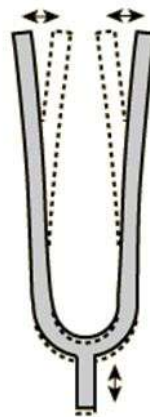


# Physics of Musical Instruments



## Origin of Sound

Sound is a wave that is produced by the vibrations of material objects.



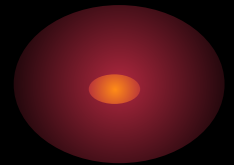
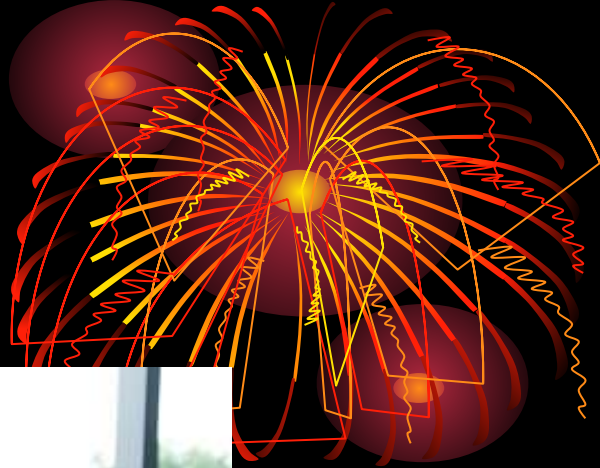
Tuning fork ↴



13-Sep-15



# Water on Speaker



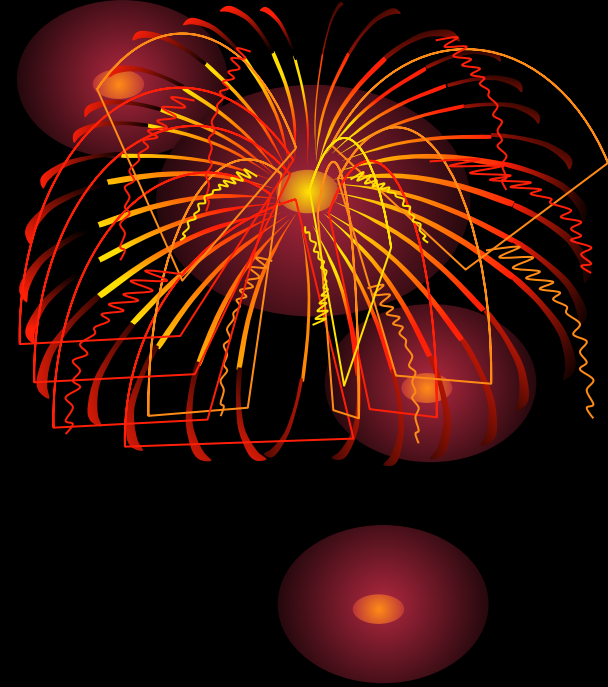


# American Idol

- **Type up words and find music**
- **Set up computer with speakers and microphone**



# Sound Magic Show

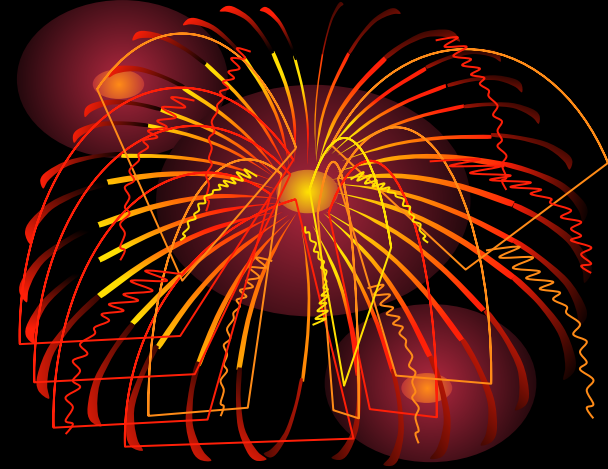


# Singing rods

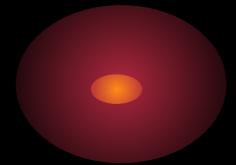
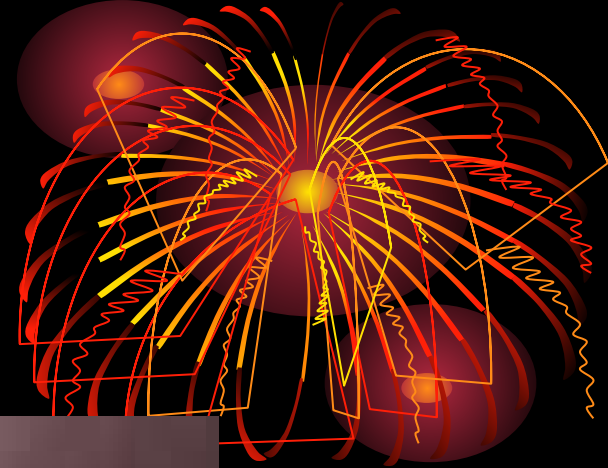




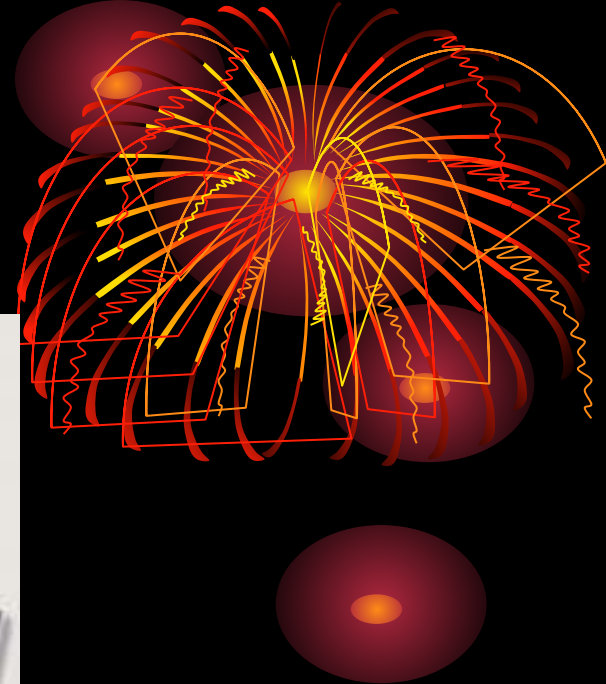
# Straw Flute



# Wine Glasses

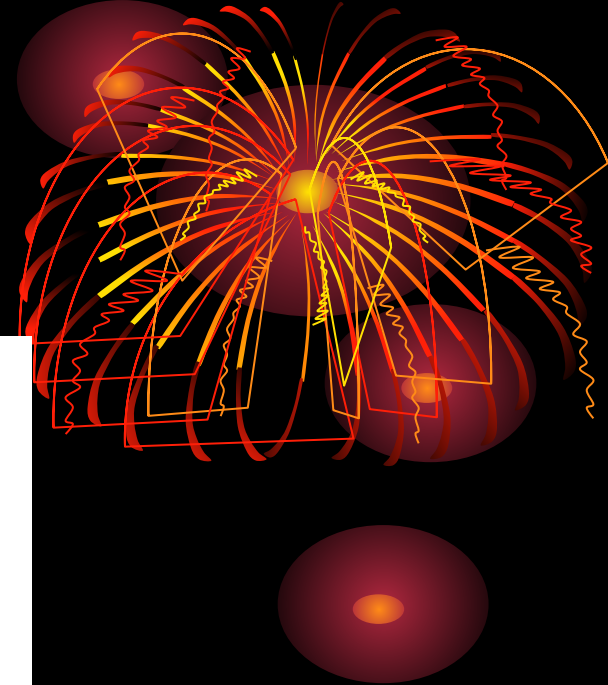


# Thunder Drum

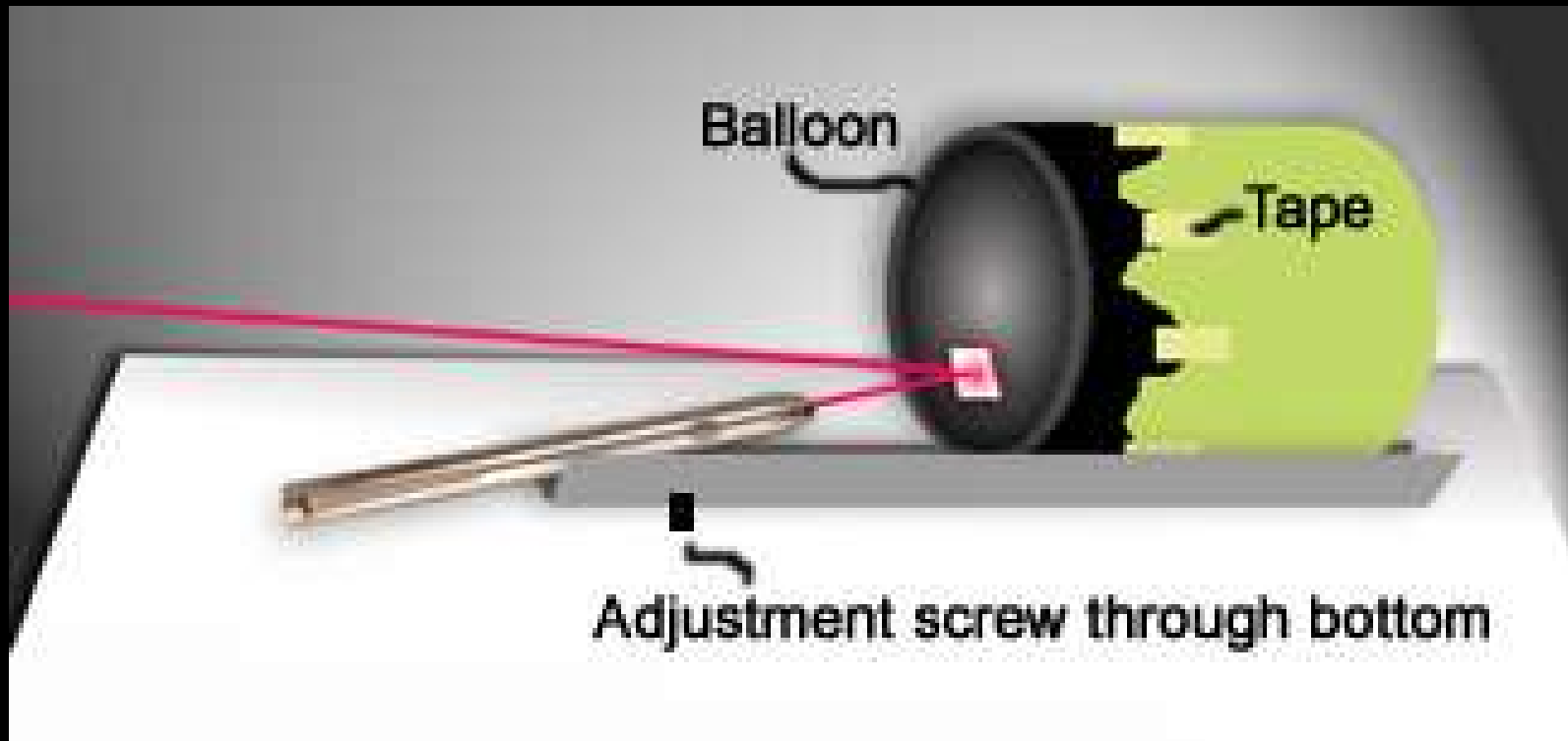
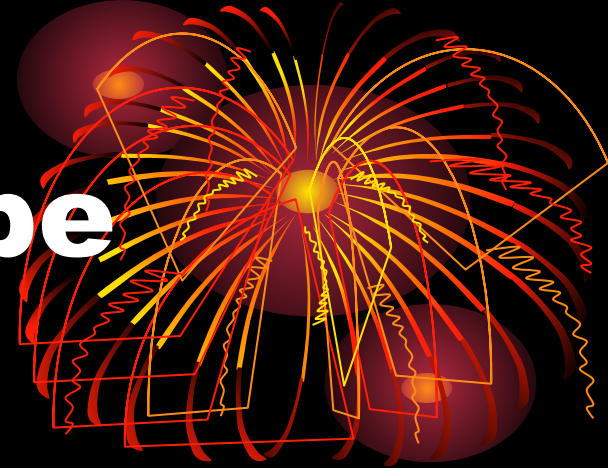




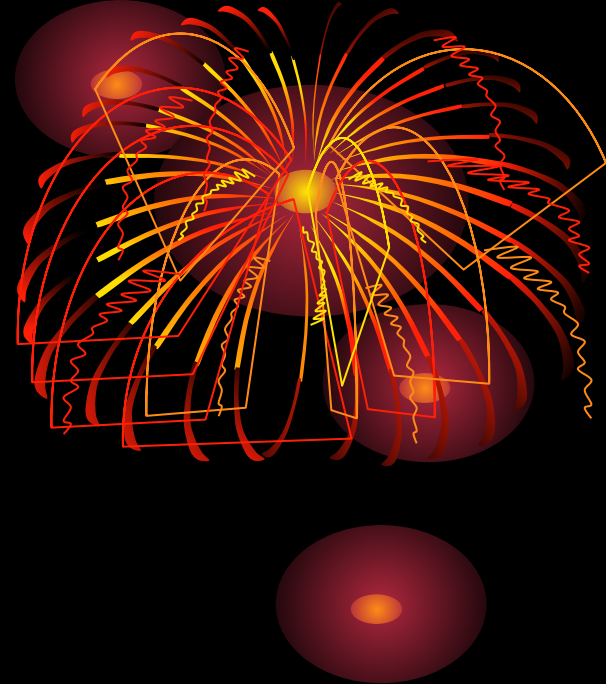
# Theremin



# Sound Oscilloscope

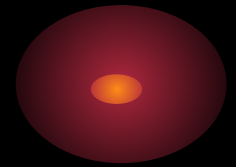
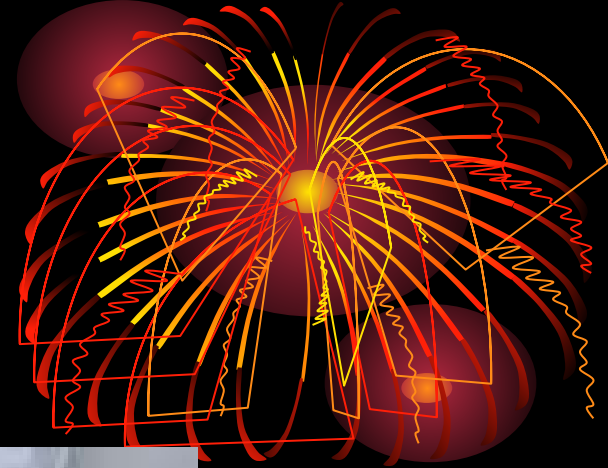


# Chicken in a Cup





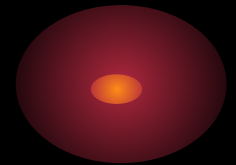
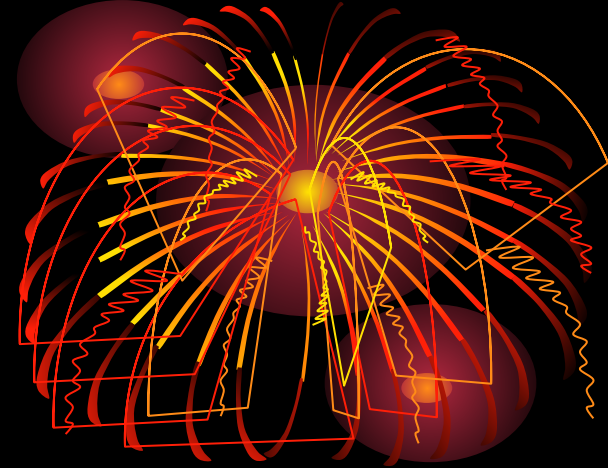
# Resonance Bowl



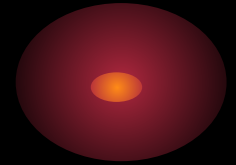
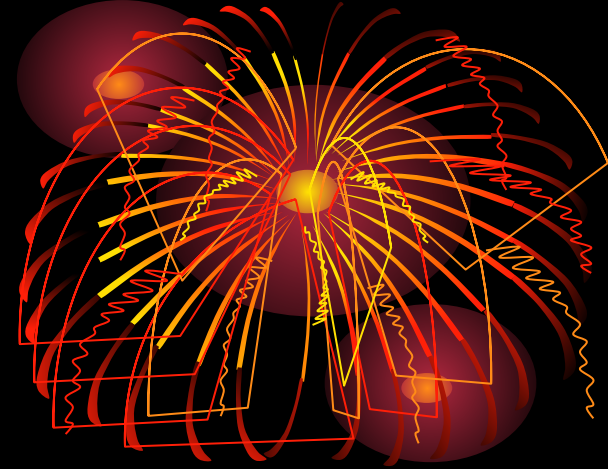
# Tibetan Bowl



# Sand Sound

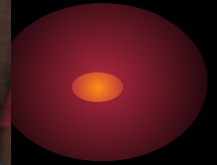


# Drag Parachute



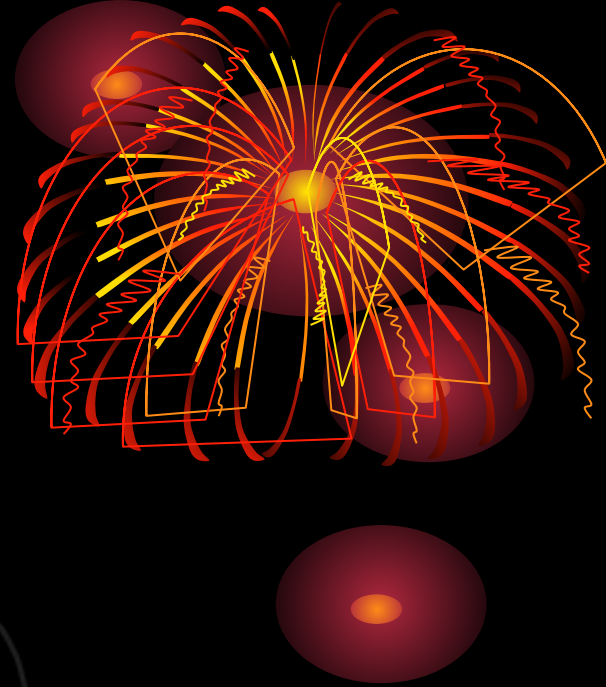


# Wind Tunnel

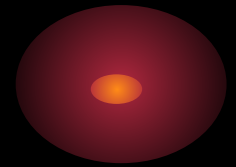
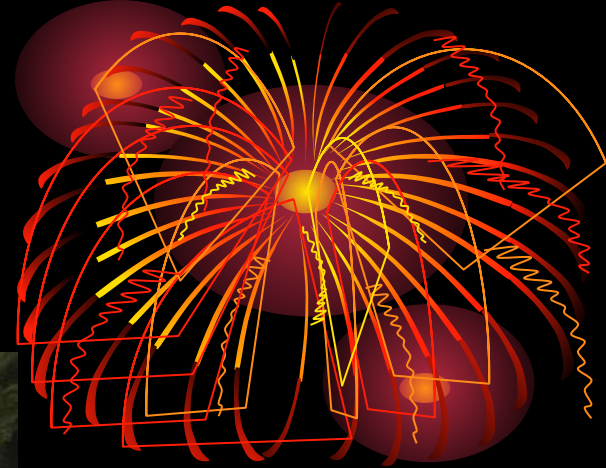




# Loopwing Planes

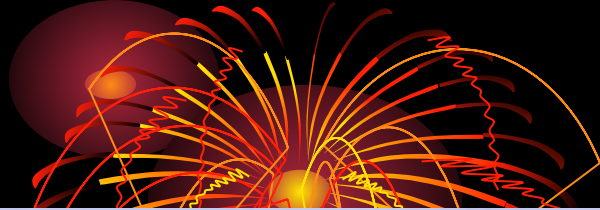


# Slingshot



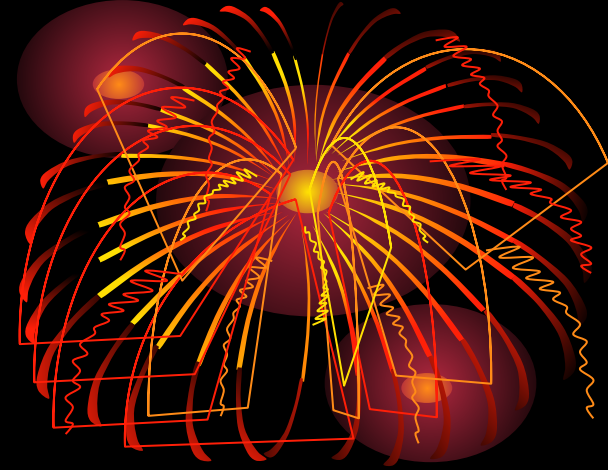


# Hovercraft



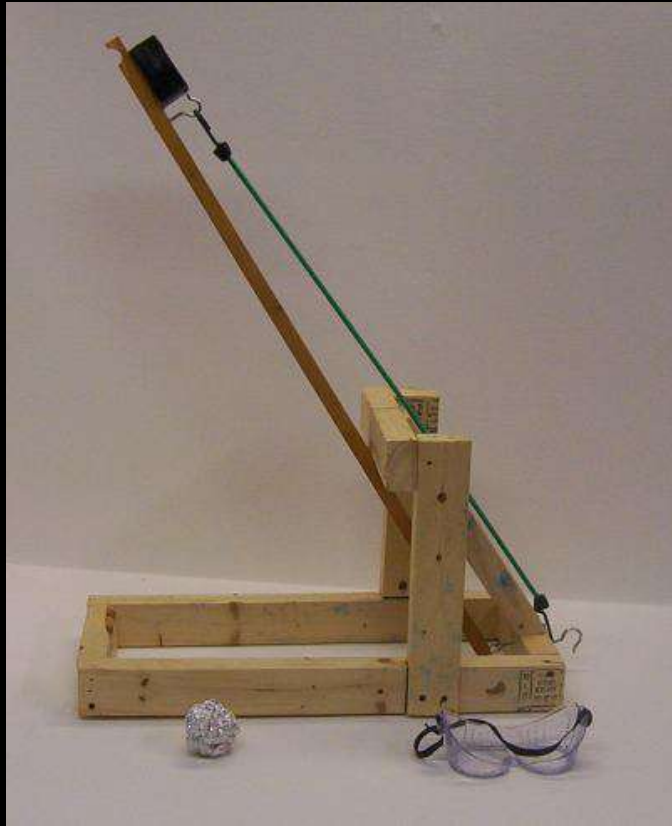


# Water Rockets



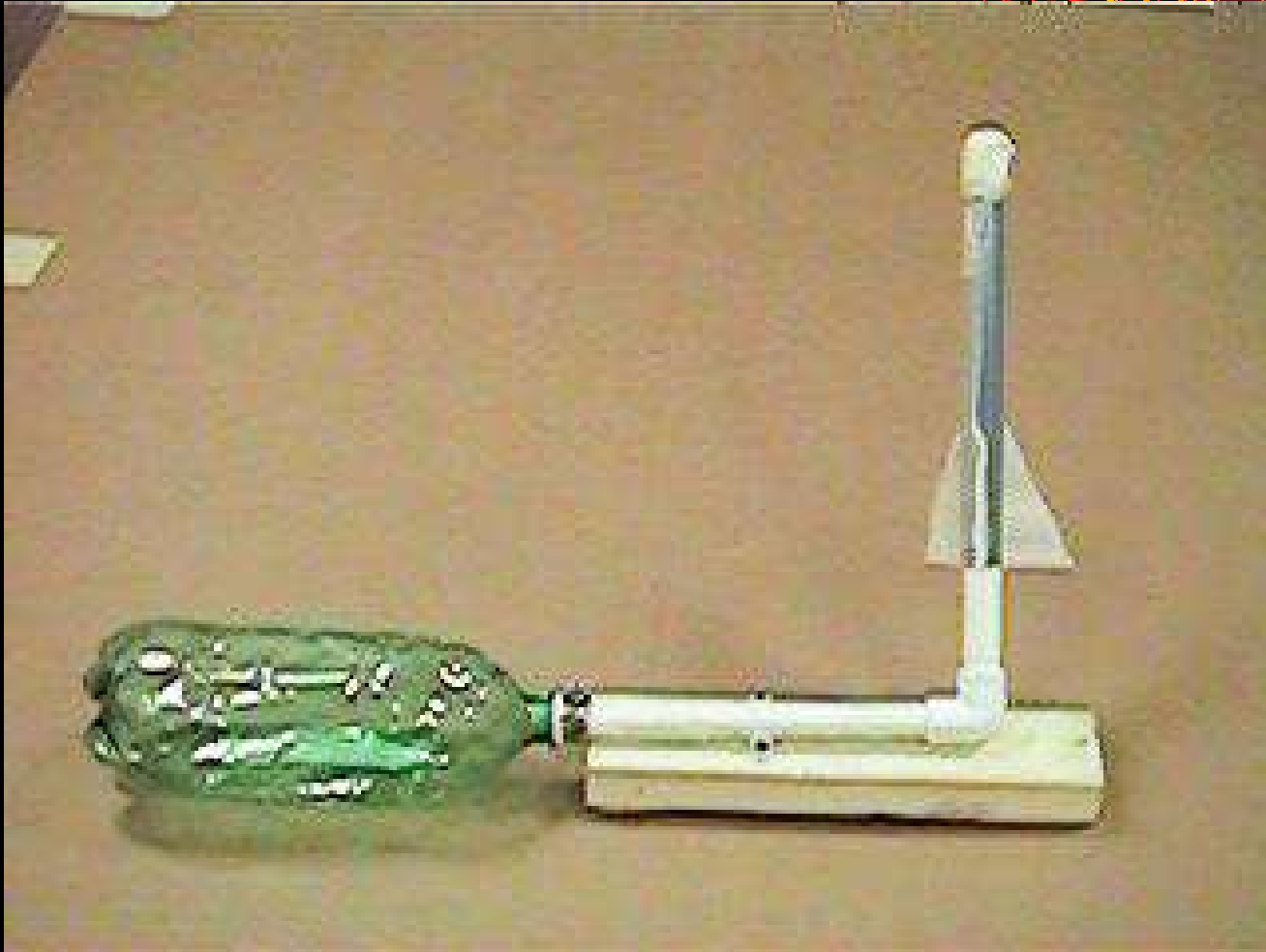
# Catapults

- **Build a catapult**





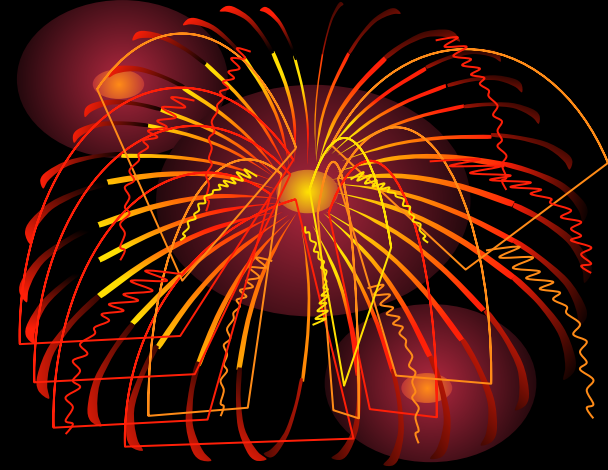
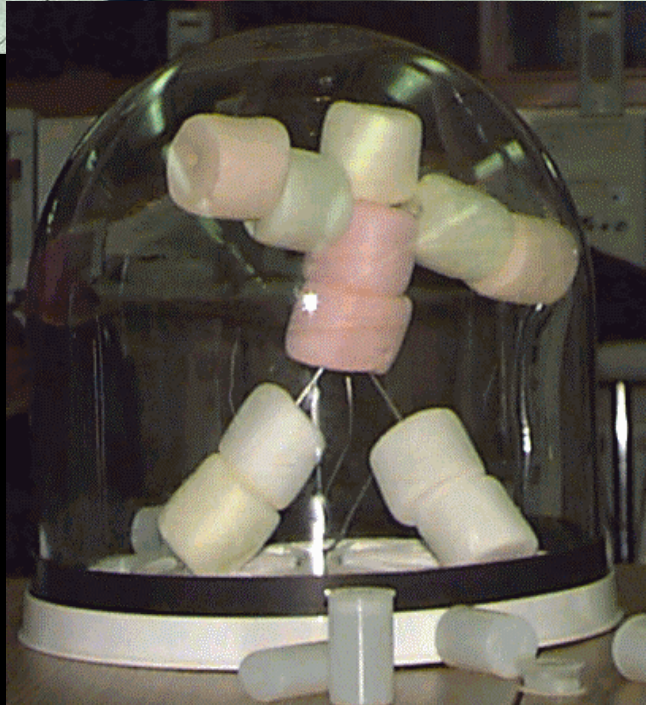
# Stomp Rockets



# Radar Gun – Kids throw

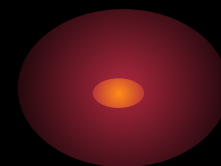
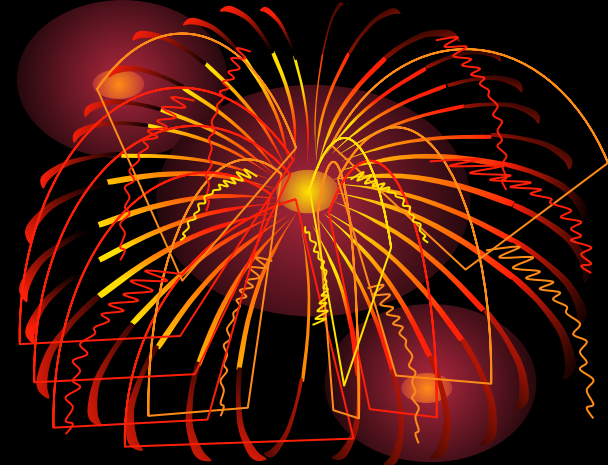


# Vacuum Pump

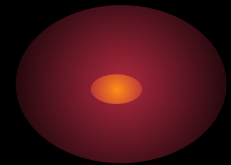
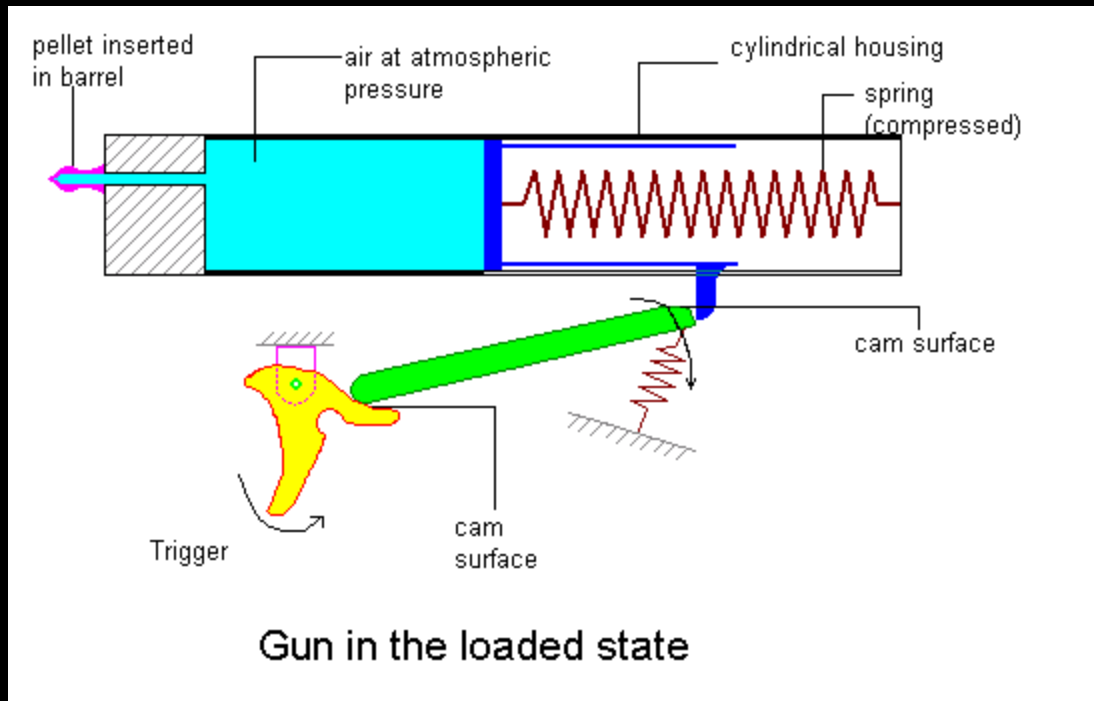
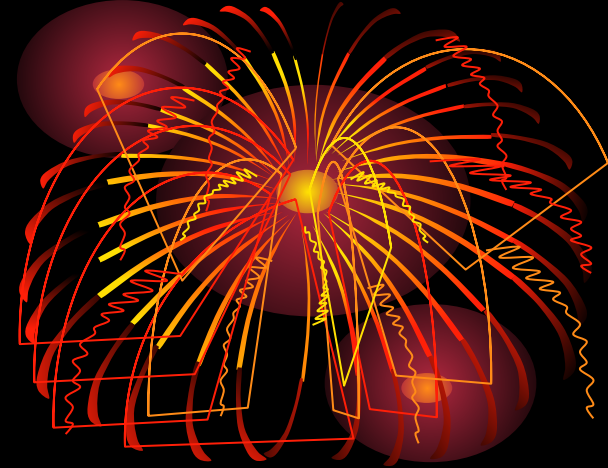




# Vacuum Pack Kid

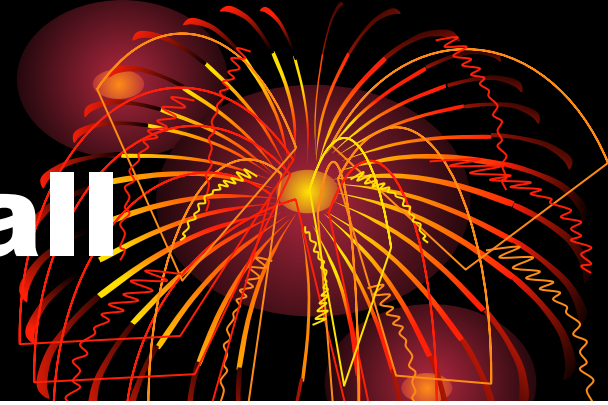


# Physics of Airsoft

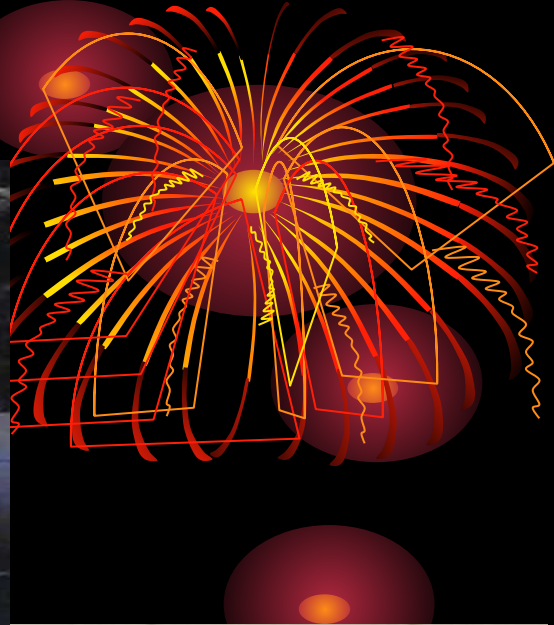




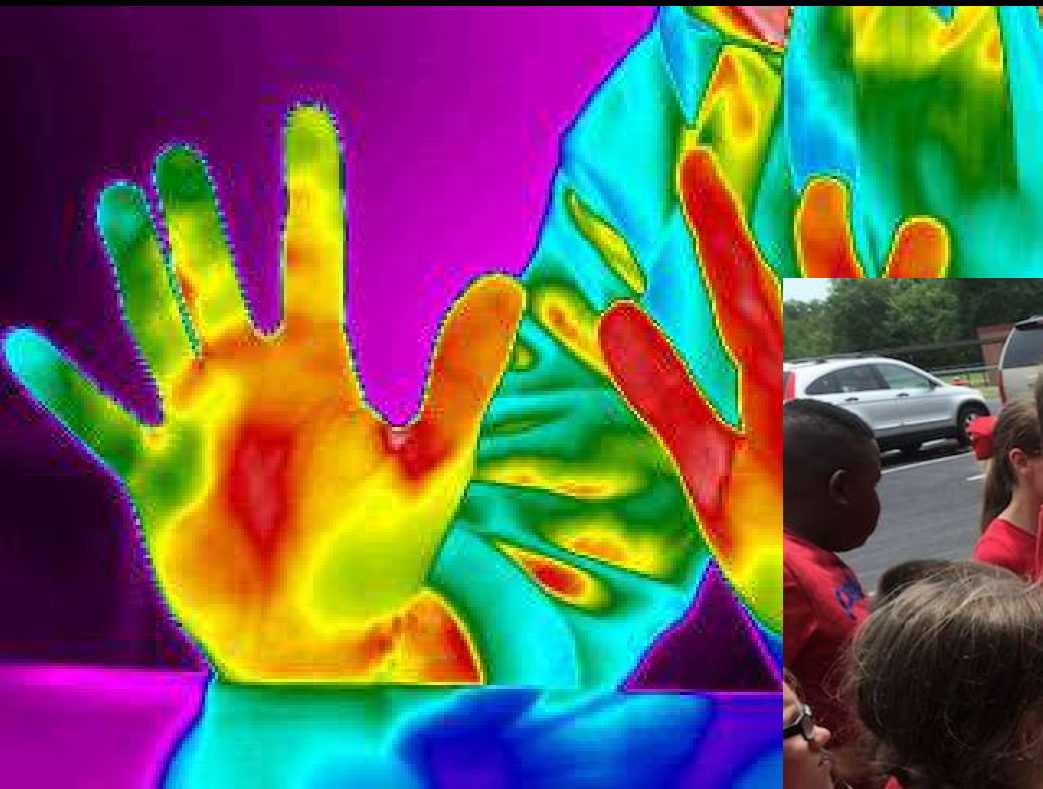
# Physics of Paintball



# Smoke Rings



# Thermal Imaging Camera





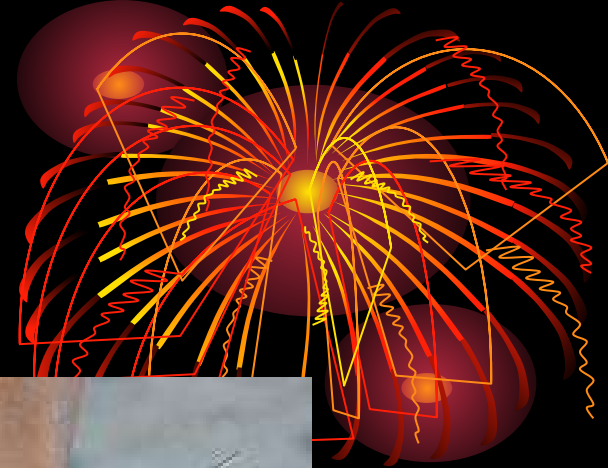
# Hot Air Balloon

- **Build a hot air balloon out of tissue paper**
- **Huge one!**



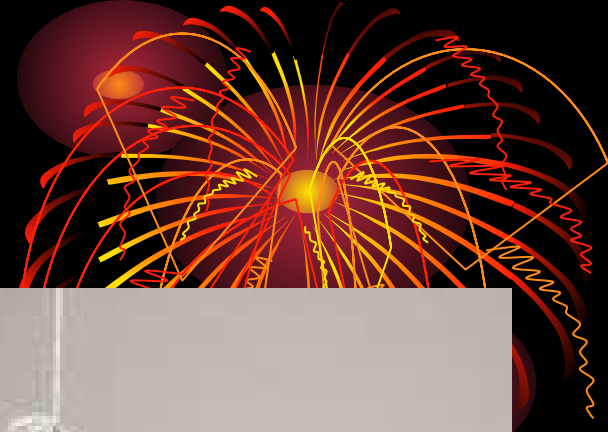
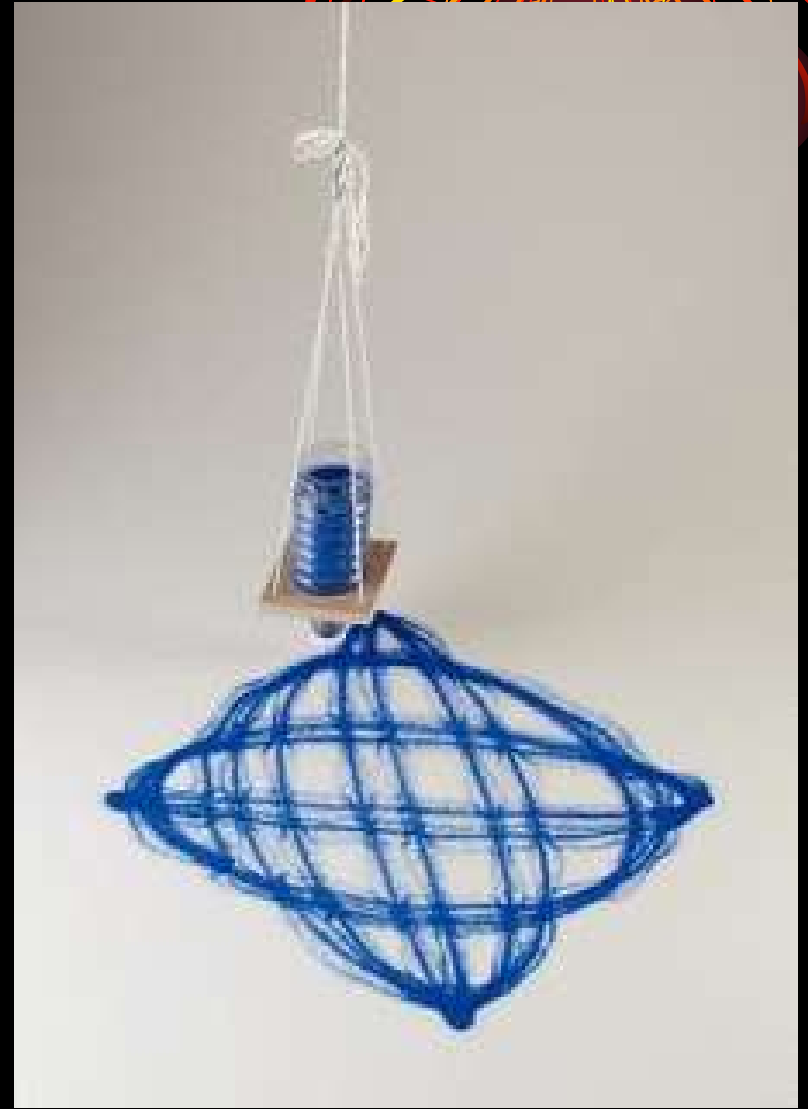


# Bed of Nails

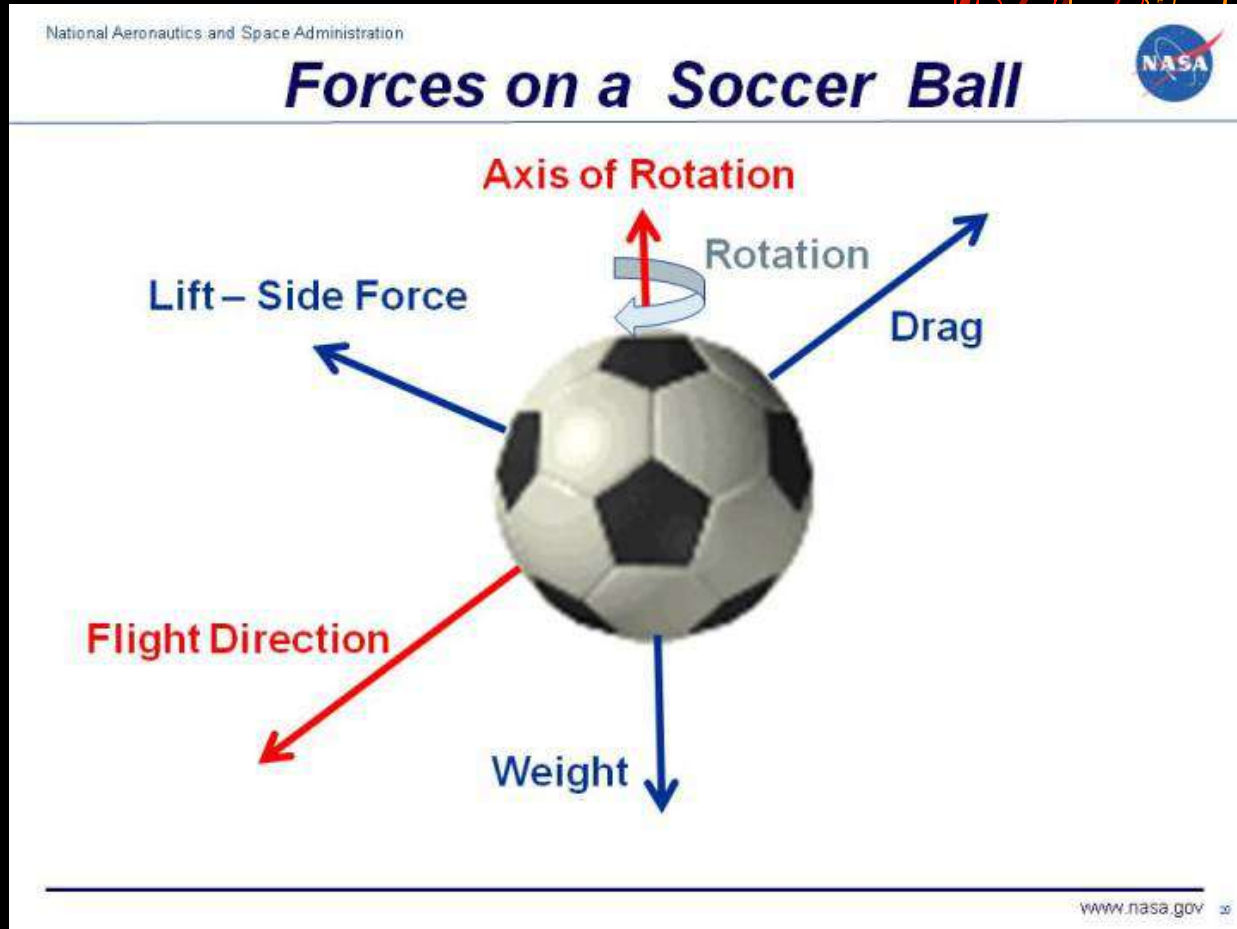


© Can Stock Photo - csp1469280

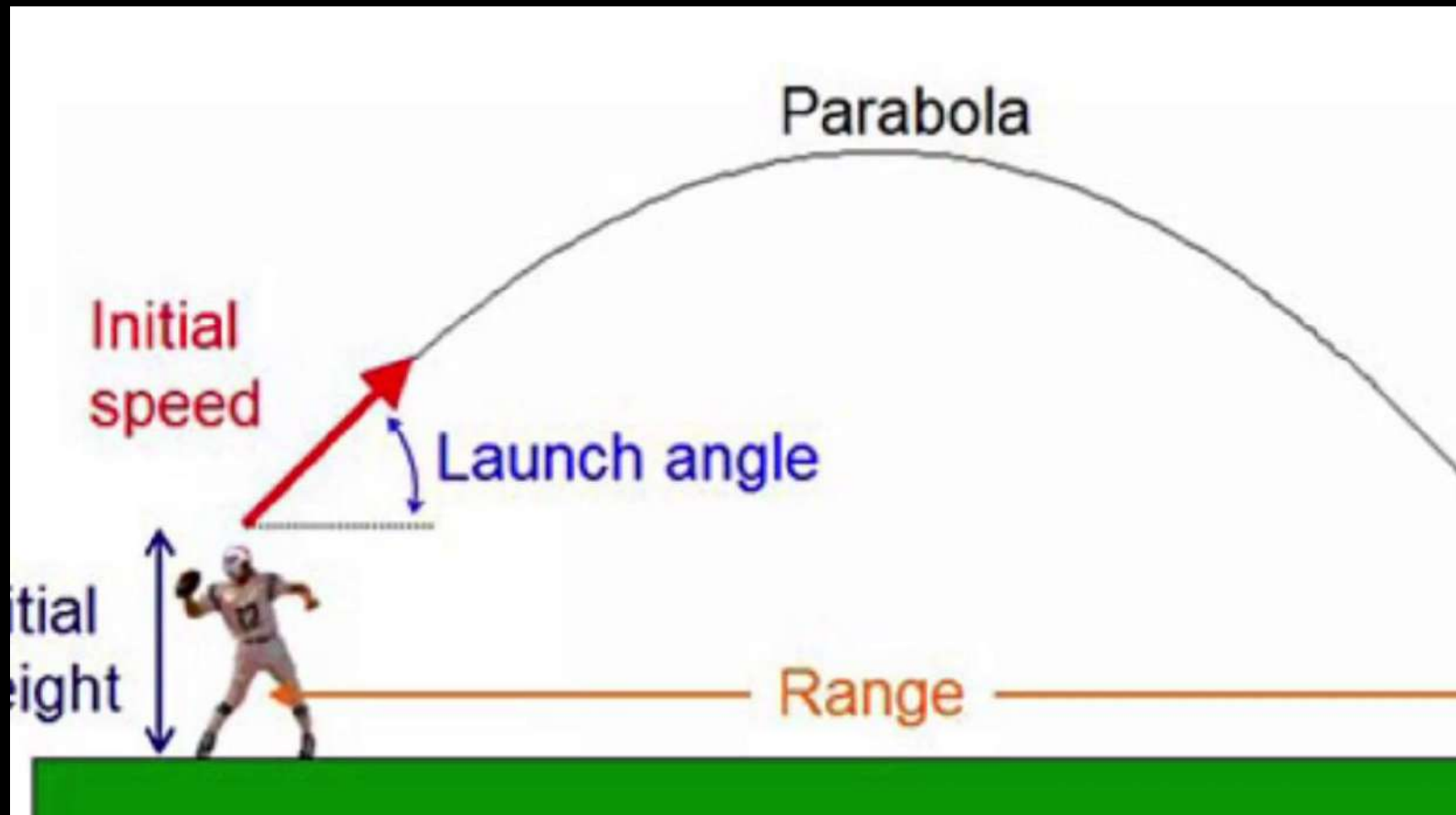
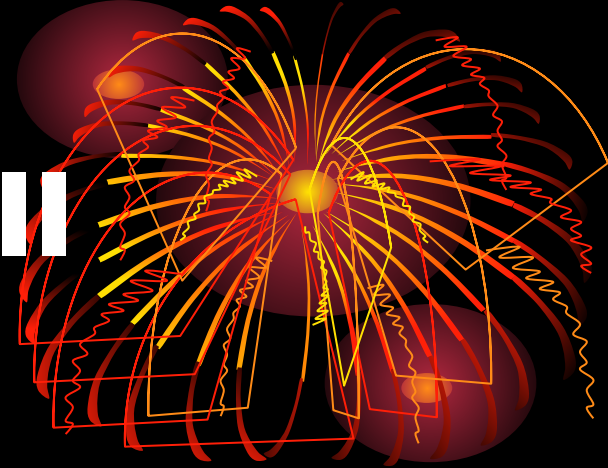
# Sand Pendulum



# Physics of Soccer

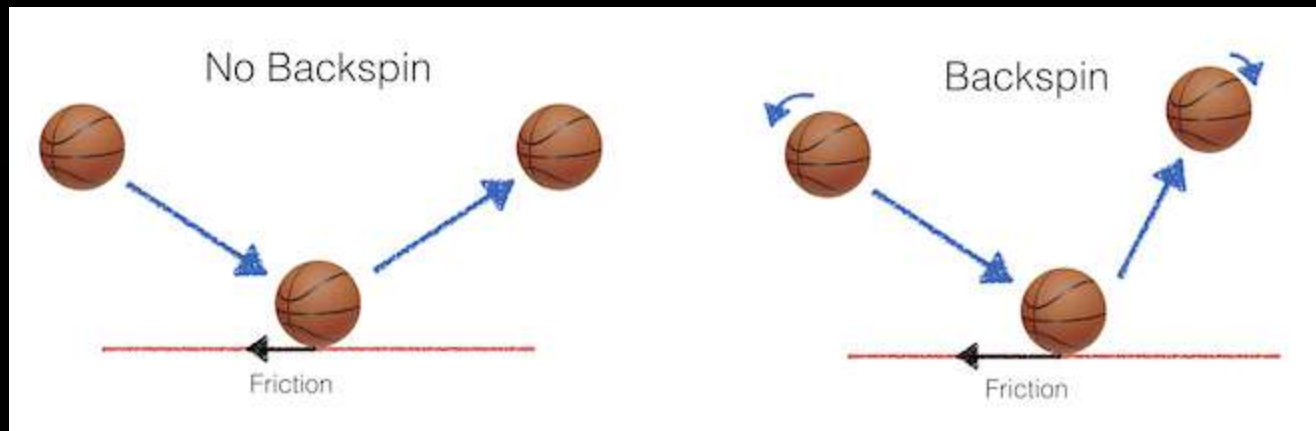
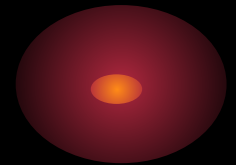


# Physics of Football

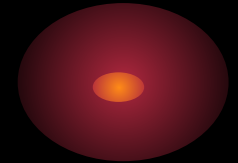
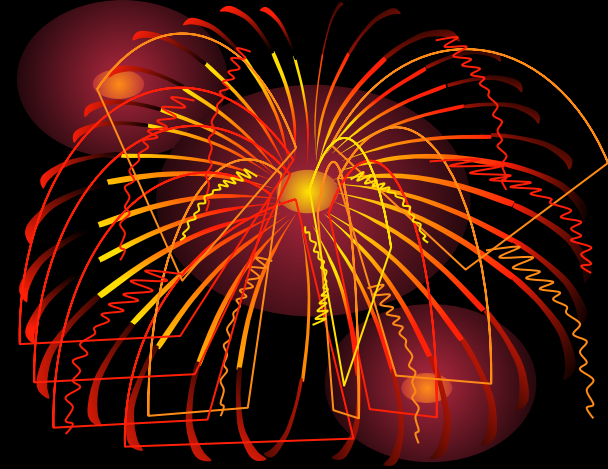




# Physics of Basketball

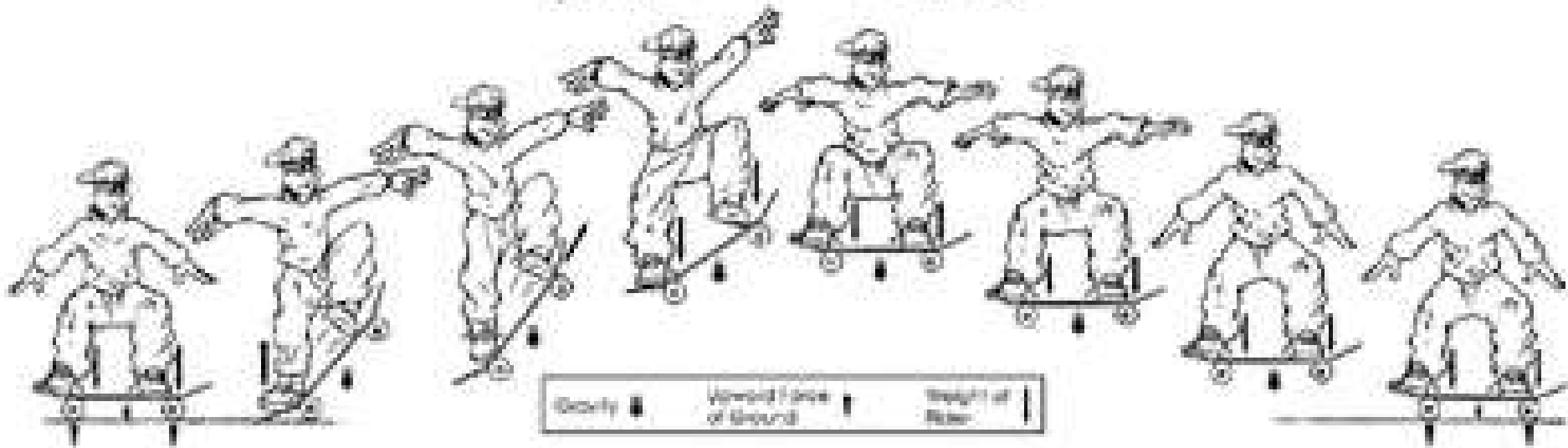


# Physics of Golf



# Physics of Skateboarding

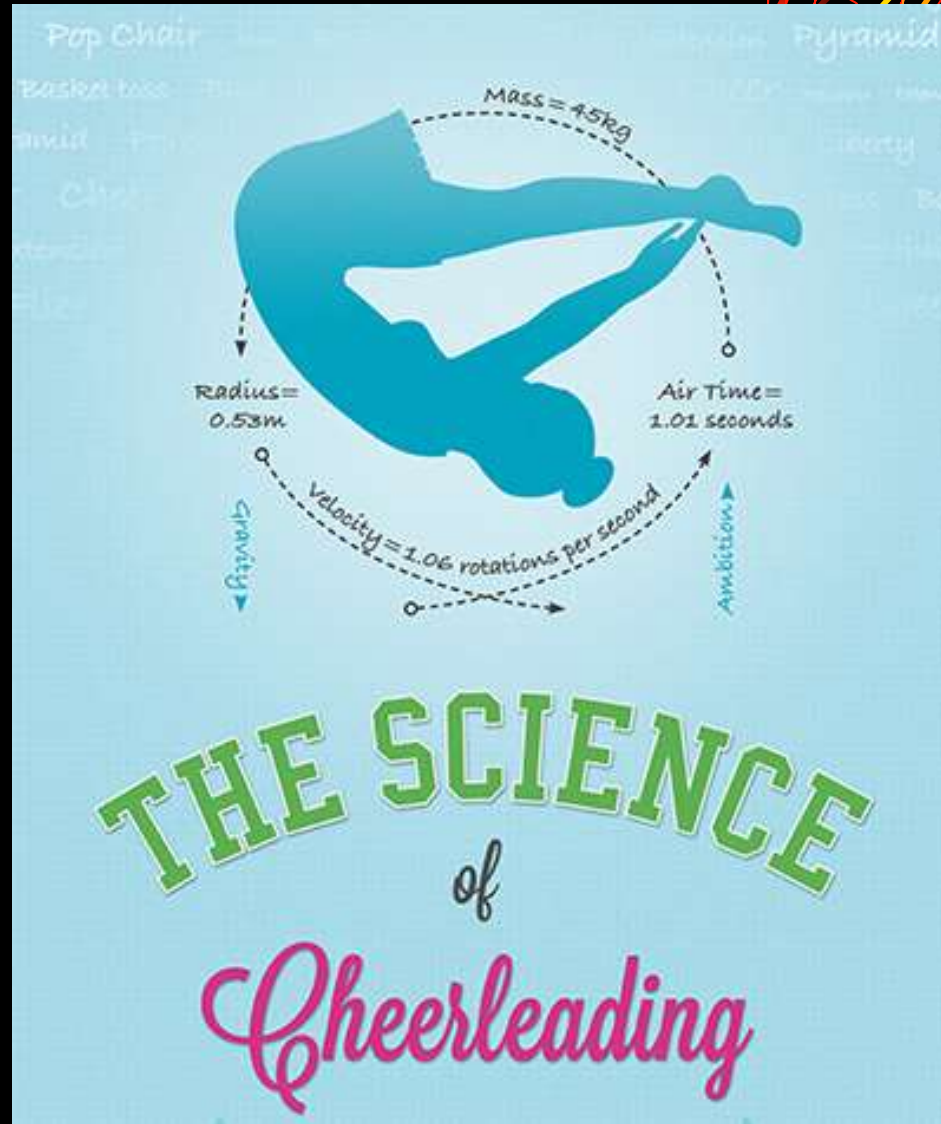
## THE OLLIE



## THE PHYSICS OF SKATEBOARDING

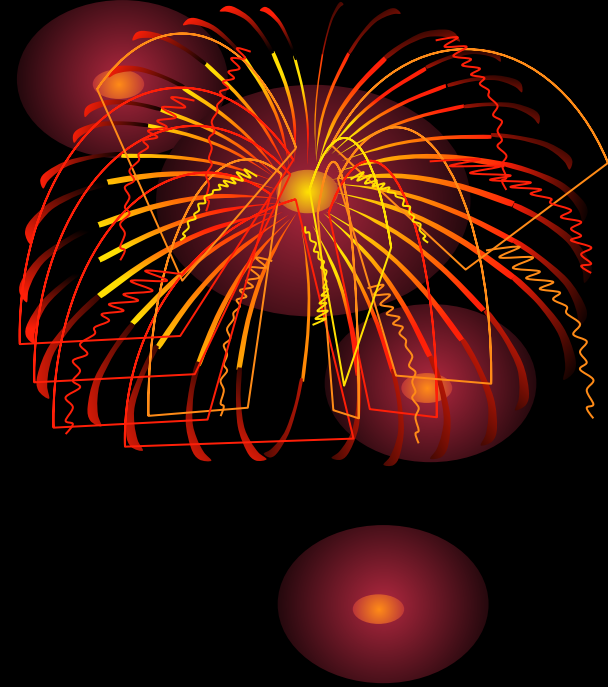
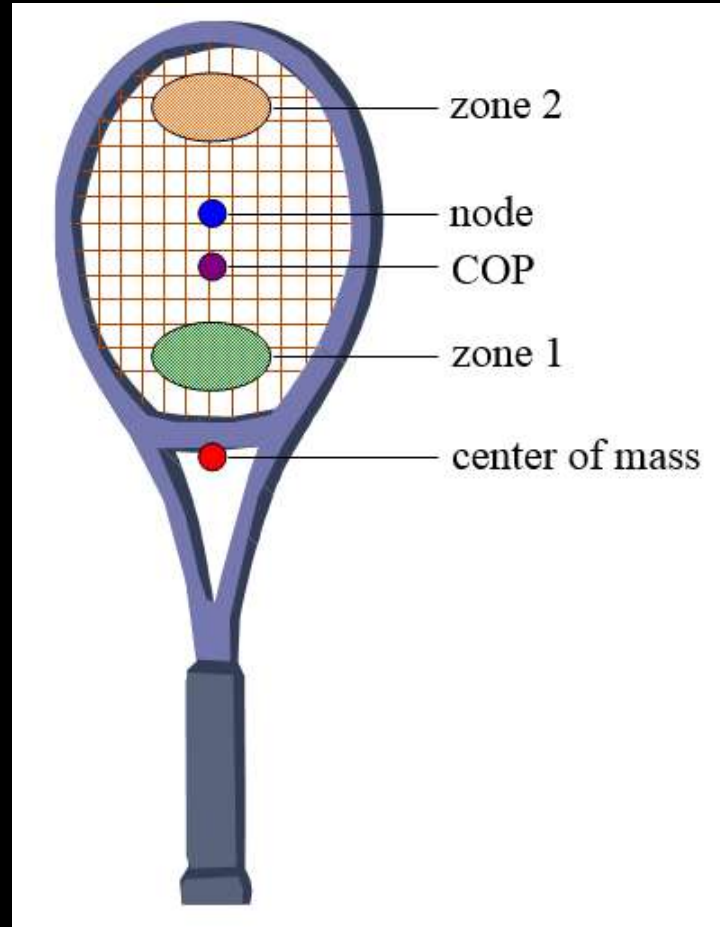
To do the Ollie, crouch down, so you can jump as high as possible. As you jump, push down hard with your rear foot. This slaps the tail of the board against the ground causing the board to bounce up. While rising, drag your front foot up along the board, bringing it even higher. At the peak of your jump, push down on your front foot, while lifting your back foot, this levels out the board. Gravity pulls you and the board back down. Before you hit, bend your knees so you can absorb the impact with the ground.

# Physics of Cheerleading and Gymnastics

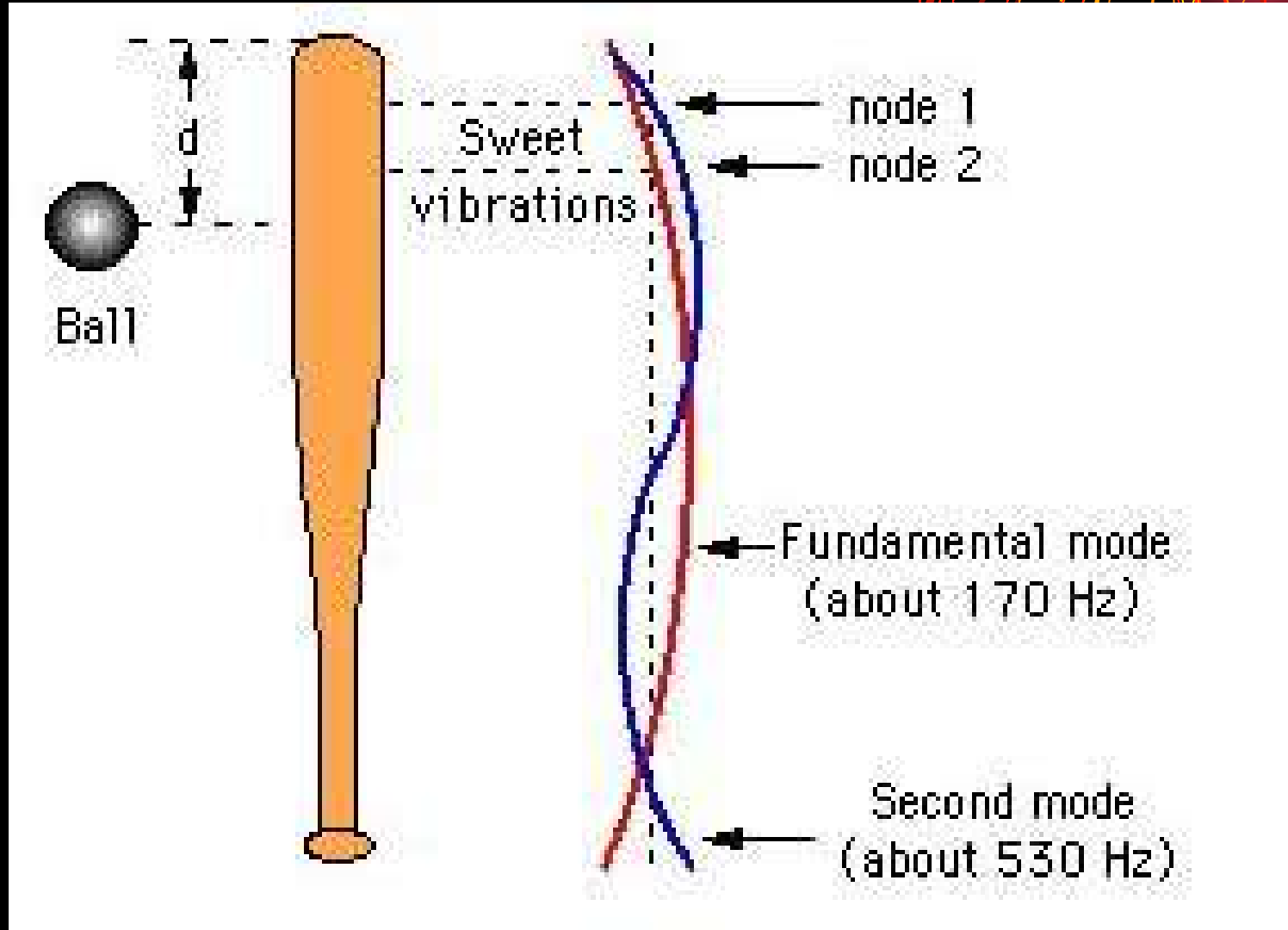




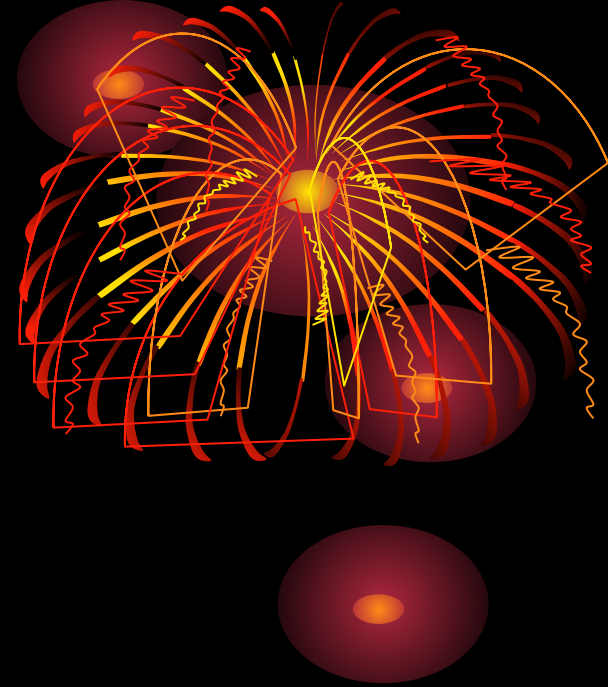
# Physics of Tennis



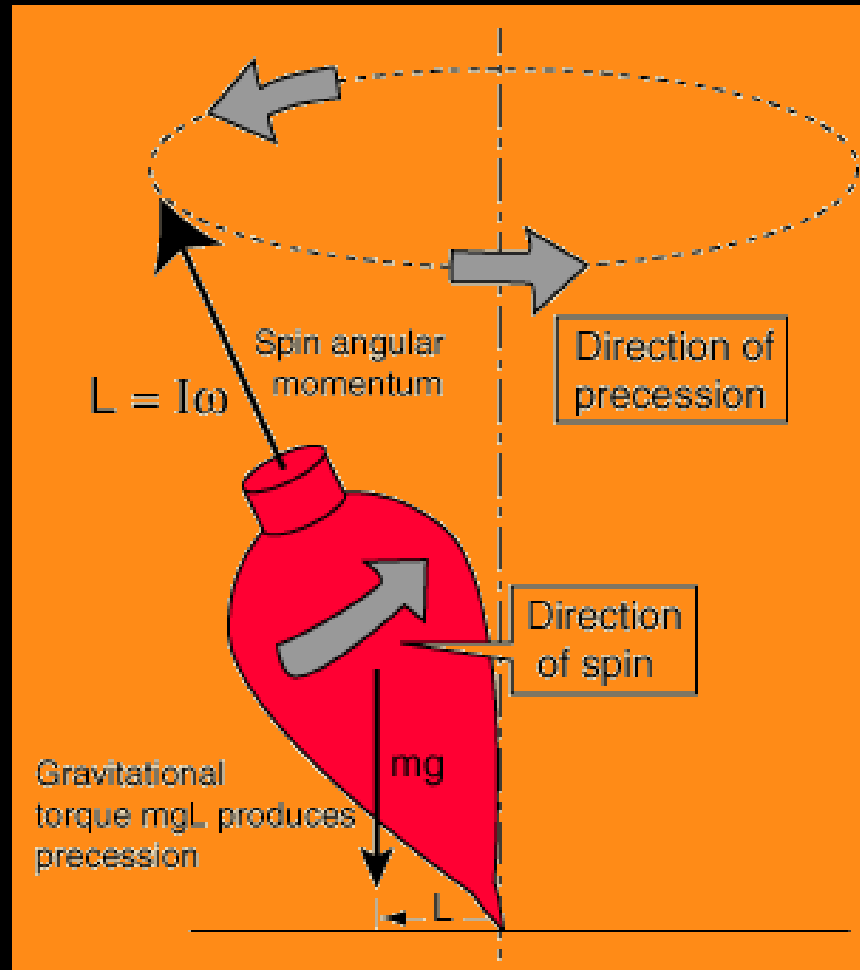
# Physics of Baseball



# Angular Motion

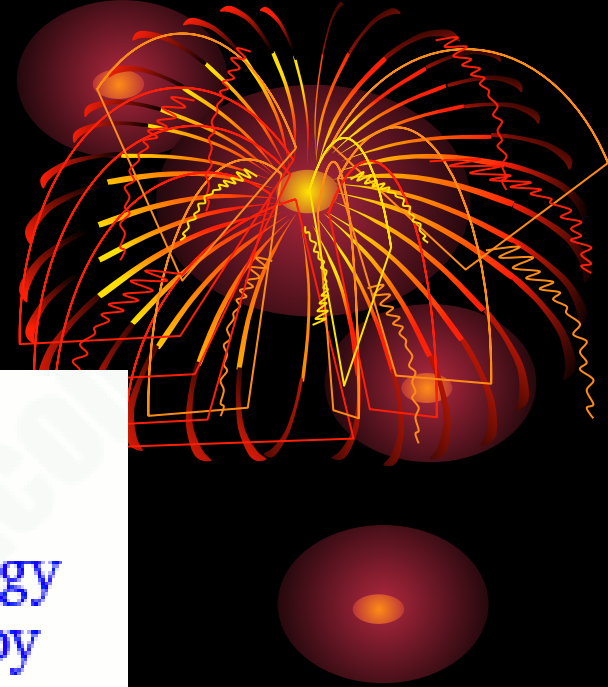
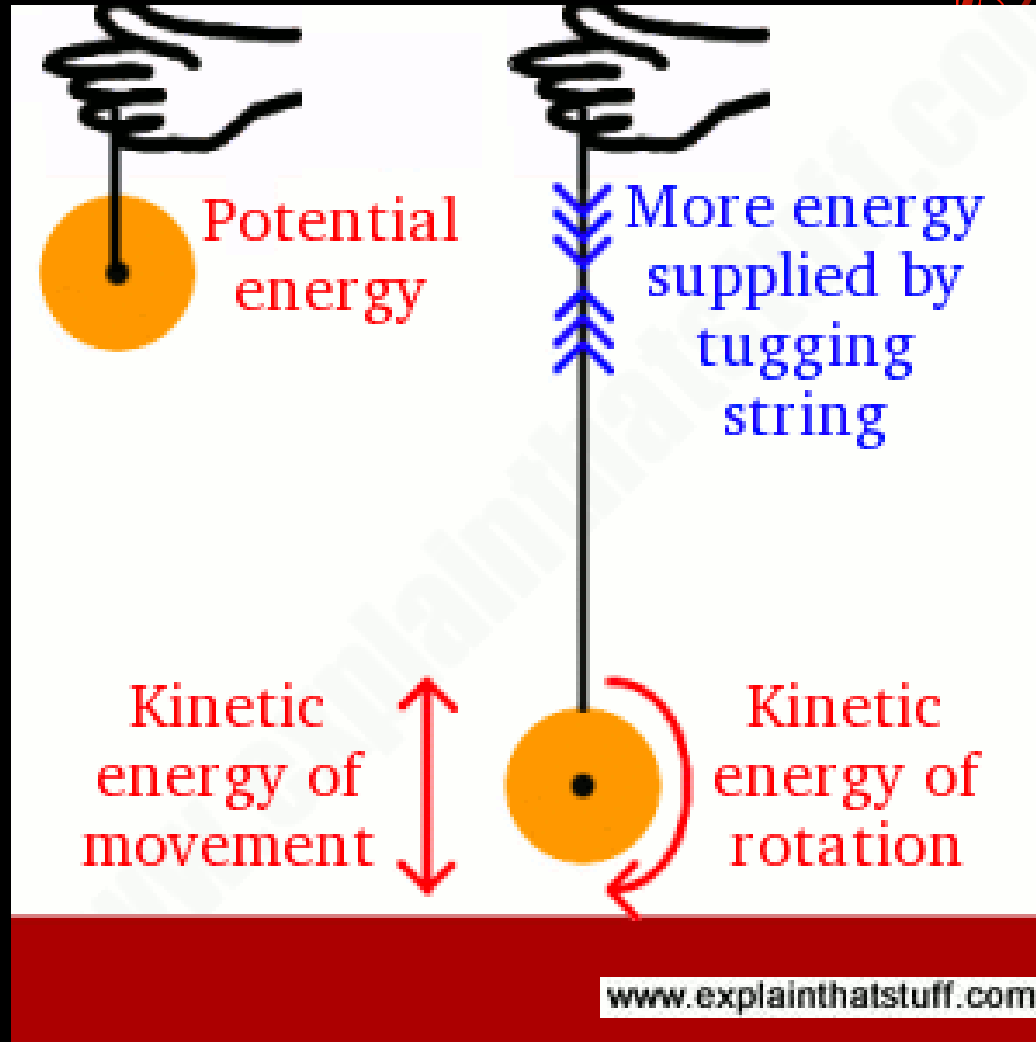


# Physics of Beyblade

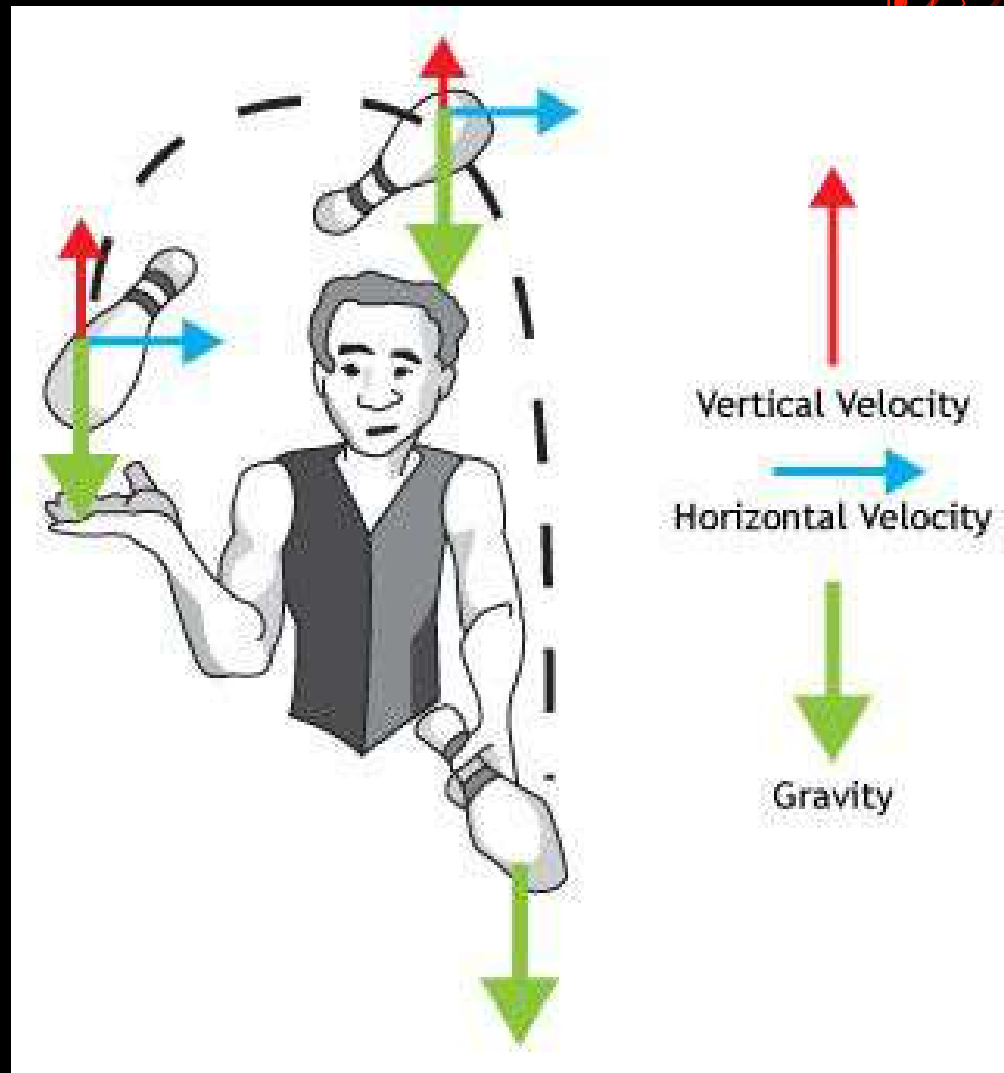




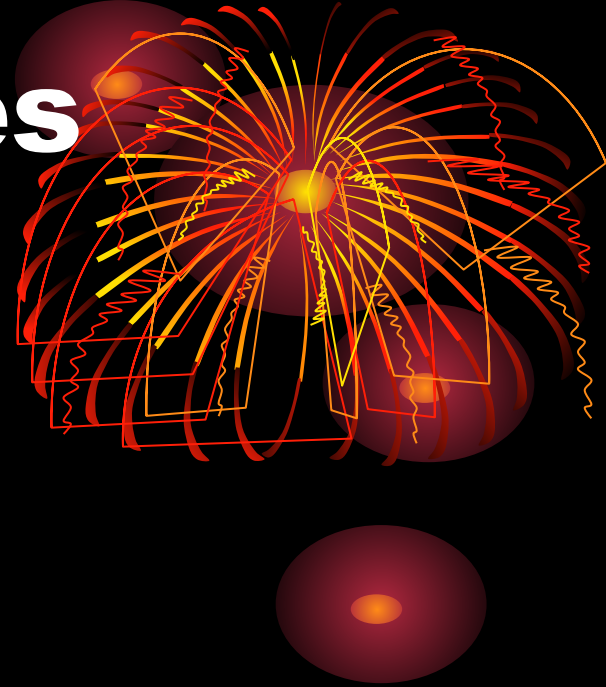
# Physics of Yoyo



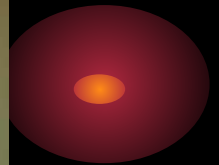
# Physics of Juggling



# Refraction Goggles



# Colored Shadows





# Virtual Reality Goggles

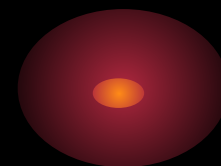
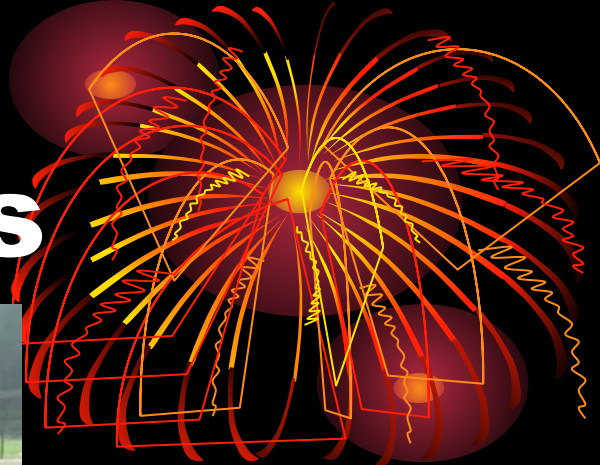
 Google Expeditions Kit  
POWERED BY  **BEST BUY** EDUCATION



# Wii with candles

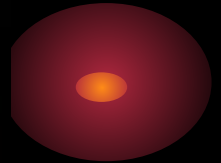
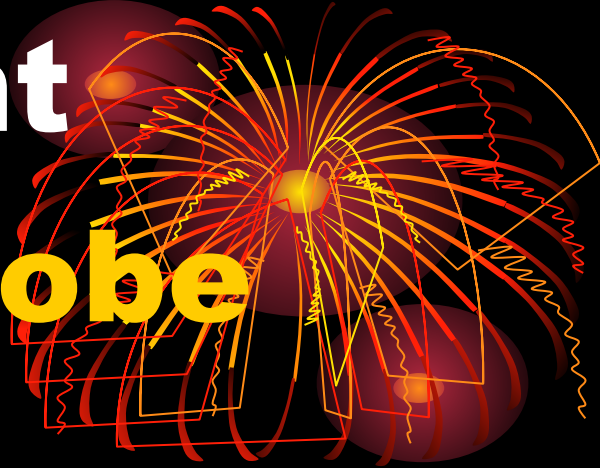


# Reflection Glasses



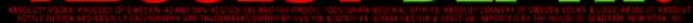
# Strobe Light

- **Need tent and strobe lights**

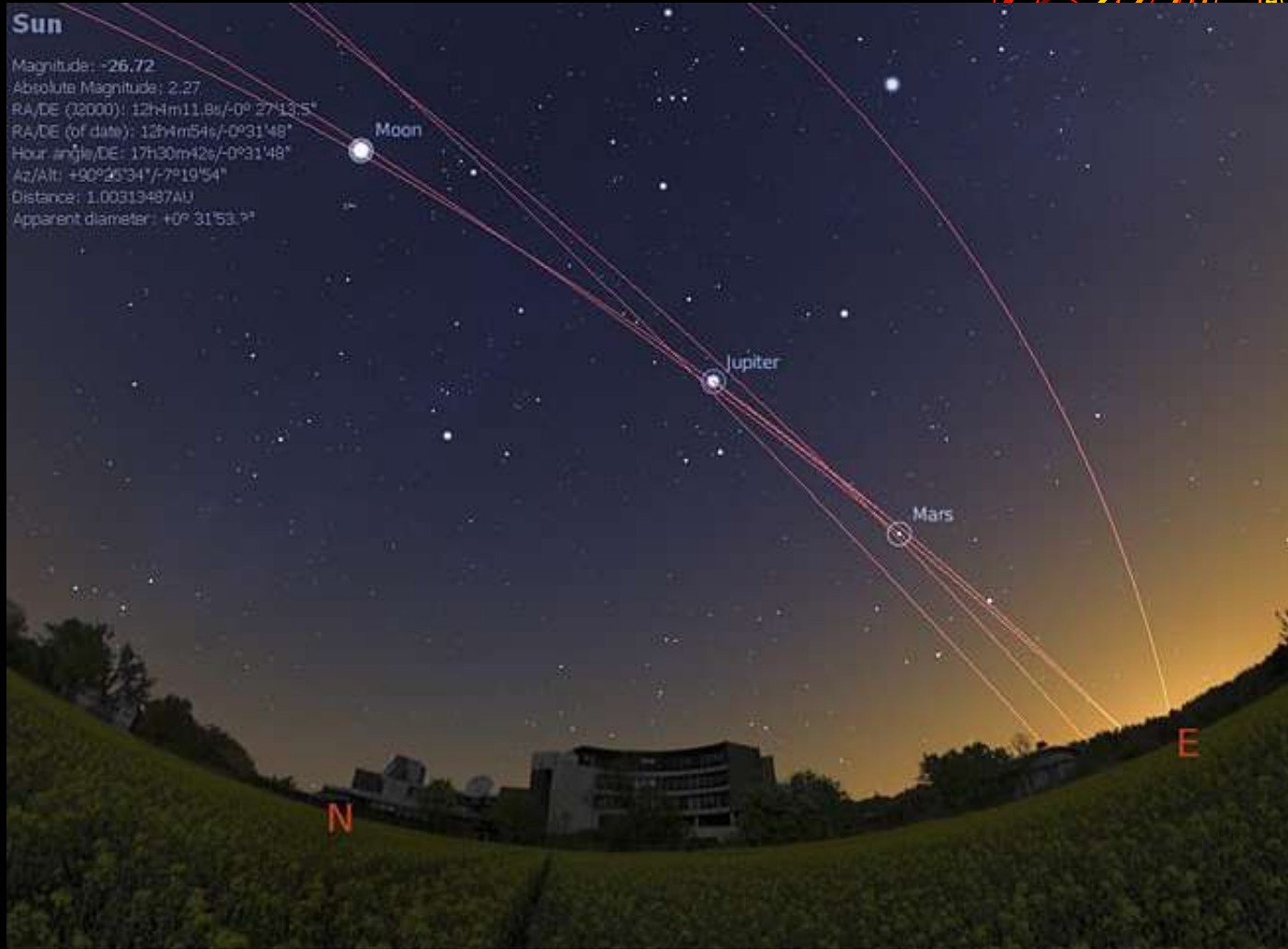




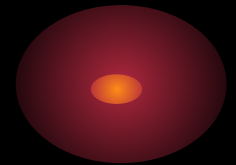
- 



# Stellarium - Planetarium

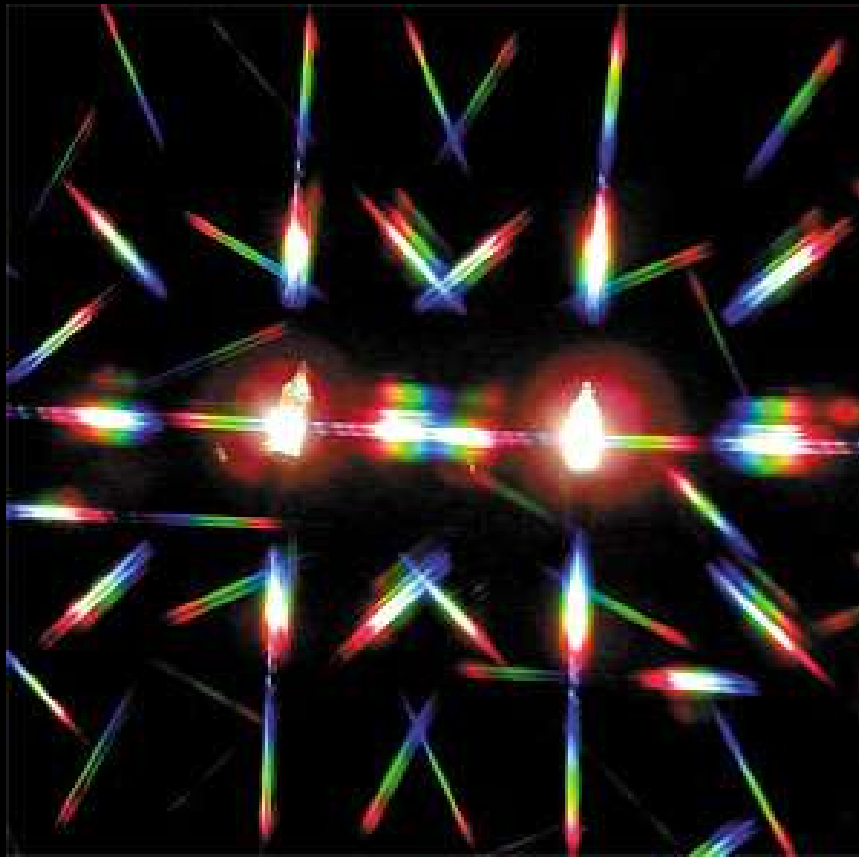


# Black Light



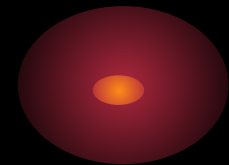
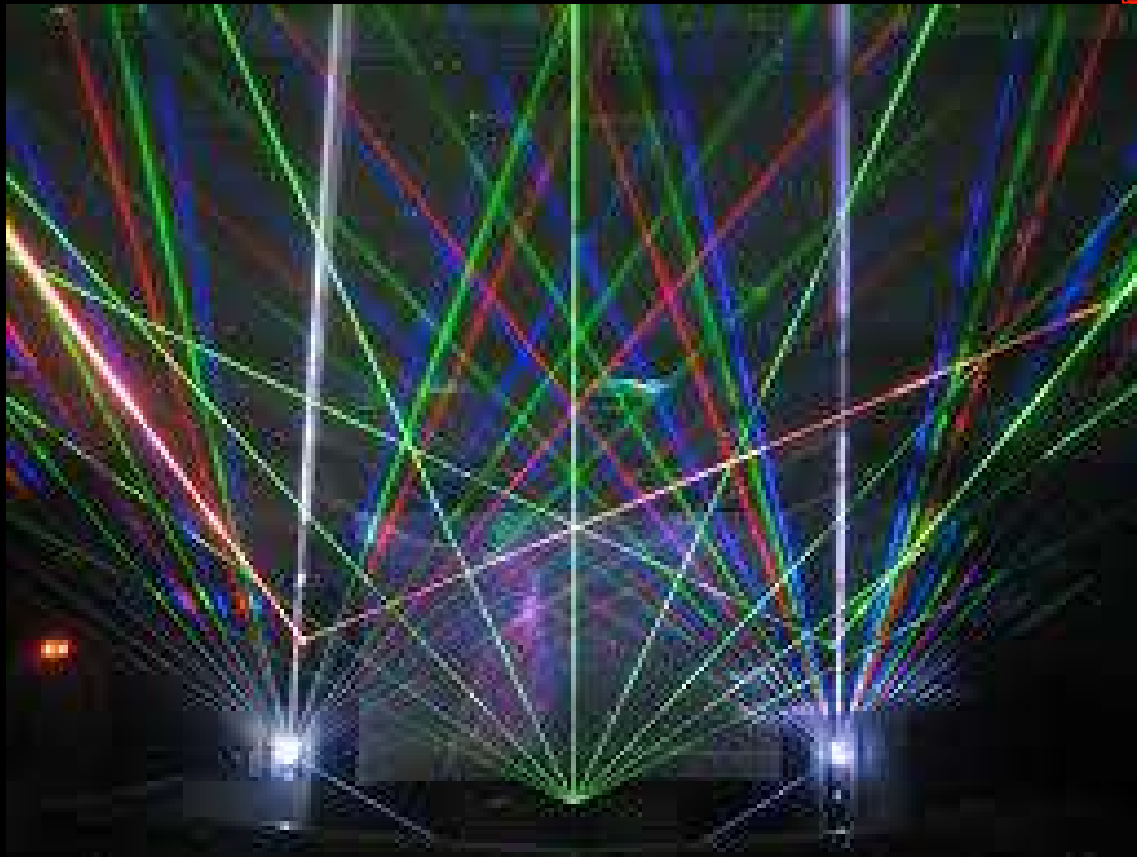
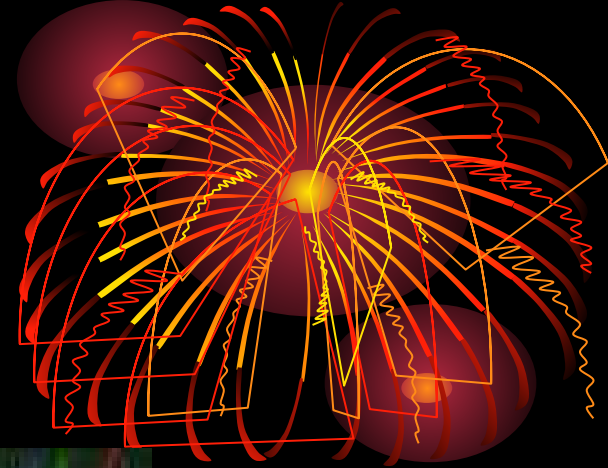
# Diffraction Glasses

- **Split light into the rainbow and make weird shapes with light.**
- **Need different light sources and tent**

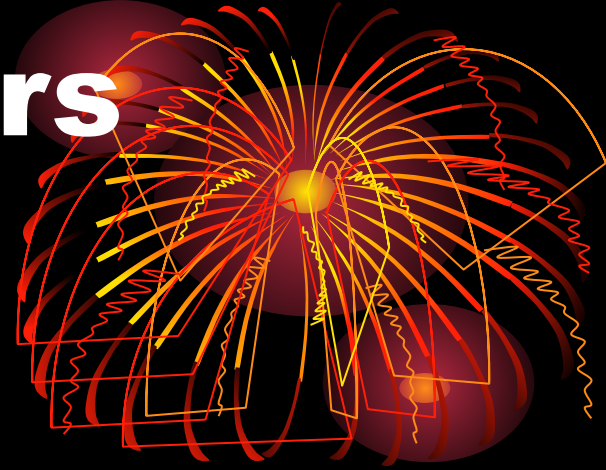




# Laser Show



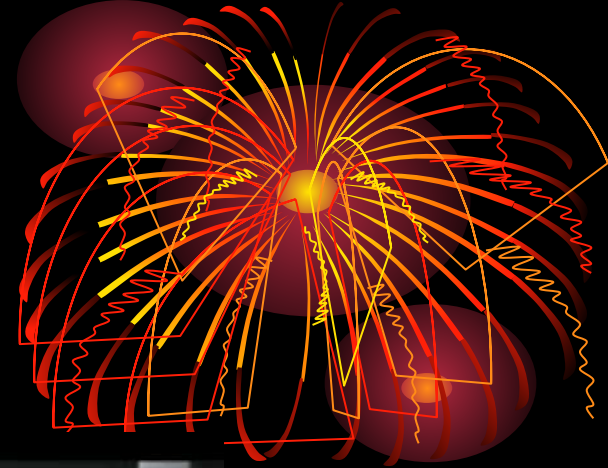
# Remote Control Cars



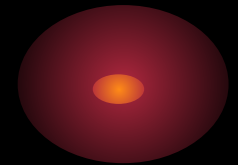
# Remote Control Sphero



# Microwave



Fun With Microwaves  
LoadingReadyRun



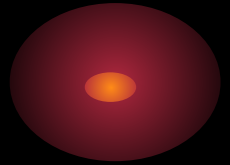


- **Make gloop or slime**



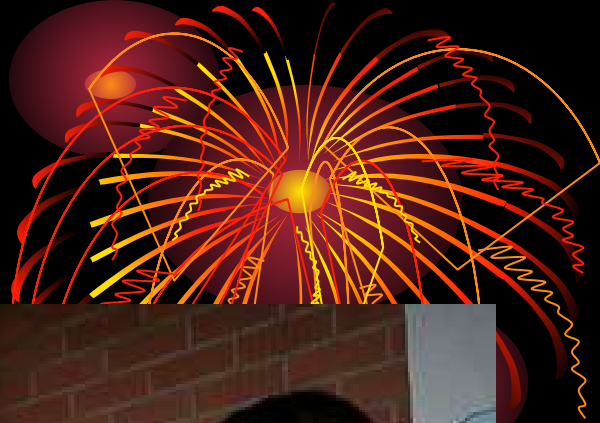
# Giant Bubbles

- **Need hula hoop, blow up pool, dish soap, and glycerin**



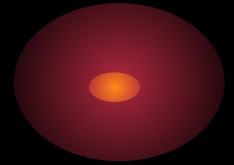
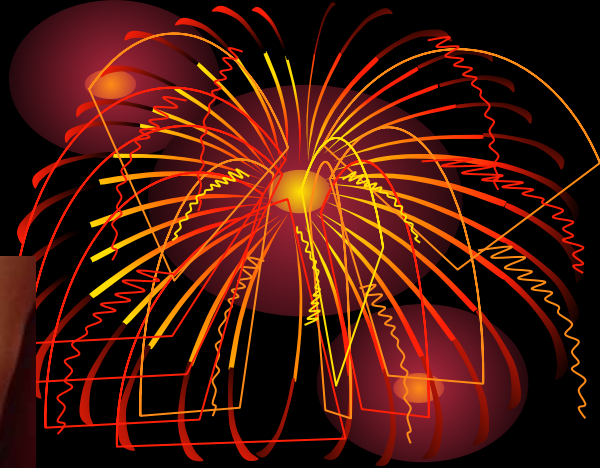


# Outside Bubbles





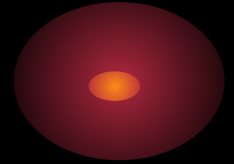
# Make Popcorn



# Solar Cooker



# Cooking Marshmallows





# Cooking - Conduction





# Cotton Candy

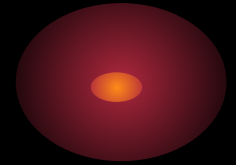


# Ice Cream

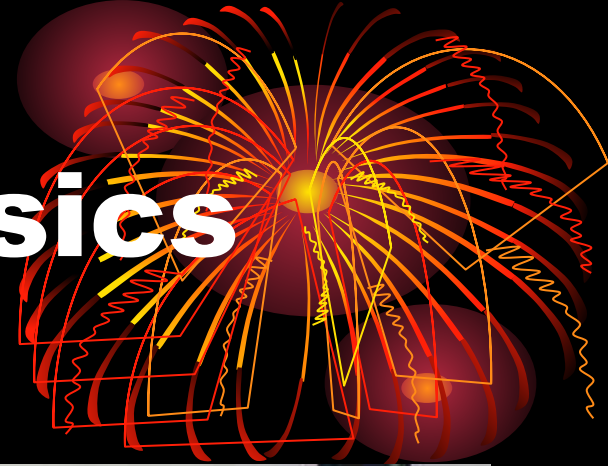




# Mentos and Coke



# Magic Show - Physics

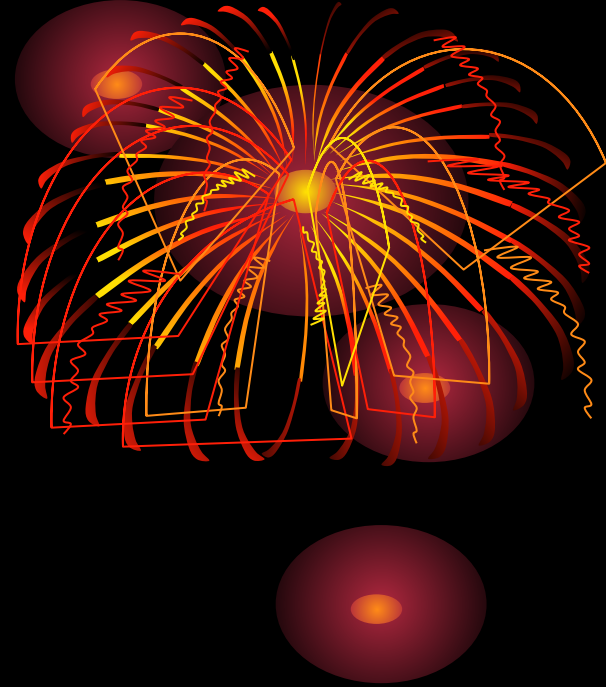


- **You pick labs**
- **Pull tablecloth**
- **Spin water**
- **Bottomless bottle**

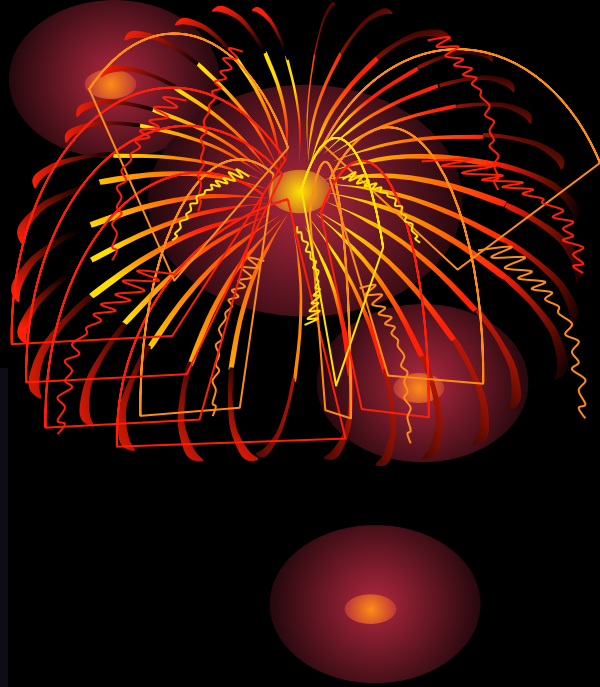




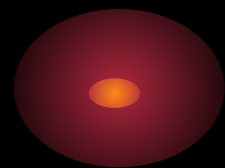
# Spinning Water



# Bottomless Bottle



# Magic Show - Chemistry



## *Elephant Toothpaste*



# Acetone and Styrofoam

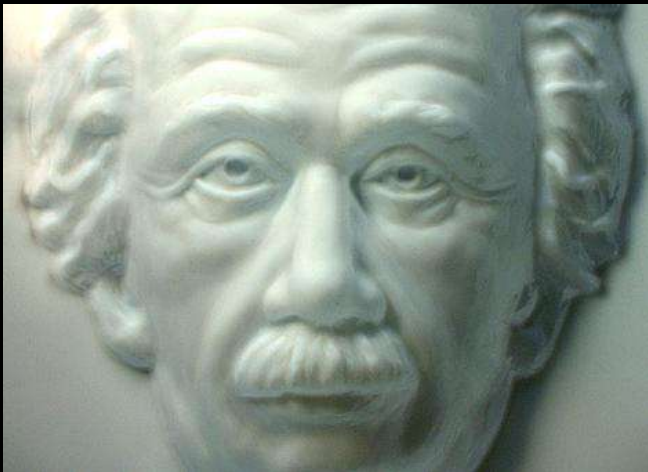




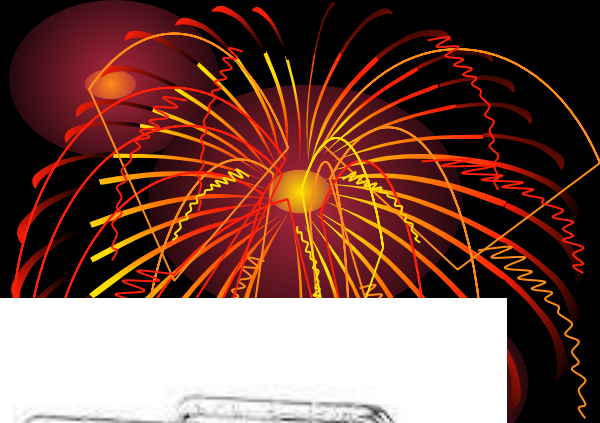
# Magic Show - Illusions



- **Strobe light fountain**
- **Light Mirror**
- **Etc.**



# Physics of Toys



# Petting Zoo!





# **Come up with your own idea!**



**Bring your own:  
Laser Tag  
Trebuchet  
Etc.**