Build a device that stores energy and then releases it to make a ball move.

**You’ll need some basic building materials and at least one ball.** Use what you have and be creative!

### Building Materials
- Paper and cardboard
- Paper cups or bowls
- Craft sticks
- Straws
- Chopsticks

### Connectors
- Pipe cleaners
- Rubber bands
- Binder clips
- Paper clips
- String
- Clothes pins

### Balls
- Tennis, ping pong, whiffle, handball or any other ball you have handy

---

**No tape or glue!** Why? Because building without tape or glue lets you change your designs faster and makes it easier to reuse materials.

---

### Ready, set, build!
1. Brainstorm how you will store energy in your device.
2. Consider the simple machines you might use.
3. Build a device that stores energy.
4. Have the device release the energy to move a ball at least 6 inches.

### Examples of Simple Machines

<table>
<thead>
<tr>
<th>Simple Machine</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulley</td>
<td>![Pulley Illustration]</td>
</tr>
<tr>
<td>Wheel &amp; Axle</td>
<td>![Wheel &amp; Axle Illustration]</td>
</tr>
<tr>
<td>Inclined Plane</td>
<td>![Inclined Plane Illustration]</td>
</tr>
<tr>
<td>Screw</td>
<td>![Screw Illustration]</td>
</tr>
<tr>
<td>Lever</td>
<td>![Lever Illustration]</td>
</tr>
<tr>
<td>Wedge</td>
<td>![Wedge Illustration]</td>
</tr>
</tbody>
</table>

---

### Bonus challenges
- Make a target and hit it.
- Try using a different ball and see what happens.
- Make a chain reaction by transferring the stored energy multiple times.
- Add sounds to your device. How many sounds can it make?

### Questions to ask yourself:
- How can I make the ball move without touching it?
- What other materials do I wish I had?

---

Share what you build on Facebook using **#TheTechChallenge**

[thetech.org/techchallenge](http://thetech.org/techchallenge)