

Fli n k e r

What You Need

- foam packing peanuts
- paper clips
- clear container that will hold water (like a soda bottle with the top cut off)



Engineering Scoop

When you put a foam peanut in water, the water "**pushes up**" on the peanut. (This is called a **buoyant force**.) At the same time, the weight of the peanut "**pushes down**" on the water. If the "pushing down" force of the peanut is **less** than the "pushing up" force of the water, the peanut **floats**. If the "pushing down" force of the peanut is **more** than the "pushing up" force of the water, the peanut **sinks**. If both forces are exactly **equal**, the peanut **flinks!** (It doesn't rise or sink in water.)

What's a Flinker? It's something that doesn't float or sink but just "flinks" in the middle.

- 1 Fill** a clear container with water.
- 2 Place** a foam packing peanut in the water.
What happens?

3 What can you do to make the peanut **flink** (neither float nor sink)? Here are some ideas: **Attach** paper clips to your peanut. Or **change the shape** of the peanut.

4 Experiment! Keep changing the design of your Flinker until it **flinks** for 10 seconds.



Sent in by Sarah P. of Maribel, WI



Try making a **different object**, like a small sponge or a penny, flink. **Predict** what you think will happen. Then **test it** and **send** your results to ZOOM.