



Pressure Around Us

KATIE OLFERT

UBC PHYSICS AND COMPUTER SCIENCE



What is pressure?

Pressure is how much something pushes at a given point on a surface.

Changing Pressure

- Adding/removing particles

Changing Pressure

- Adding/removing particles
- Changing size of container

Changing Pressure

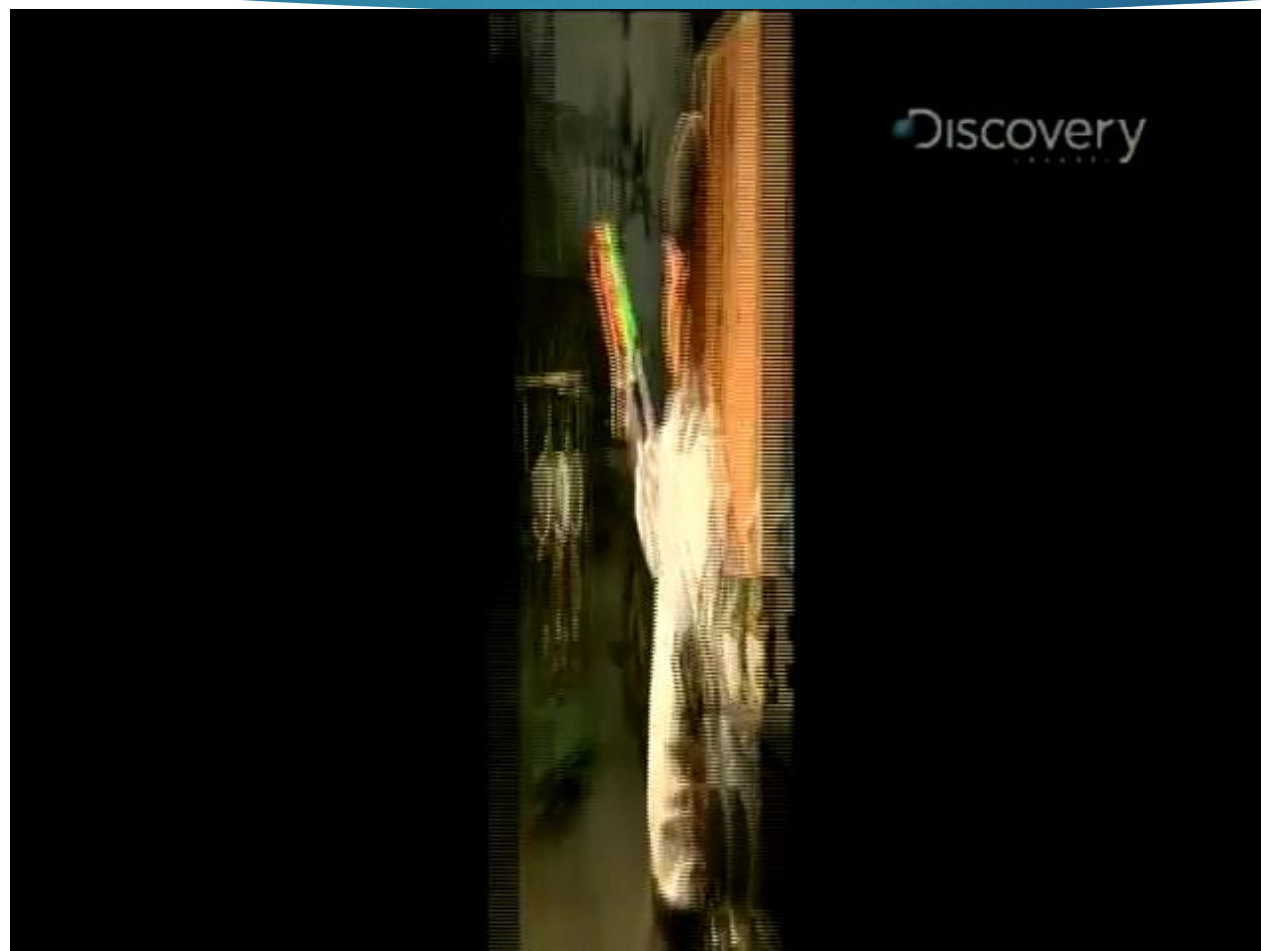
- Adding/removing particles
- Changing size of container
- Adding/removing energy



Pressure in Action

Air Pressure in a Tire

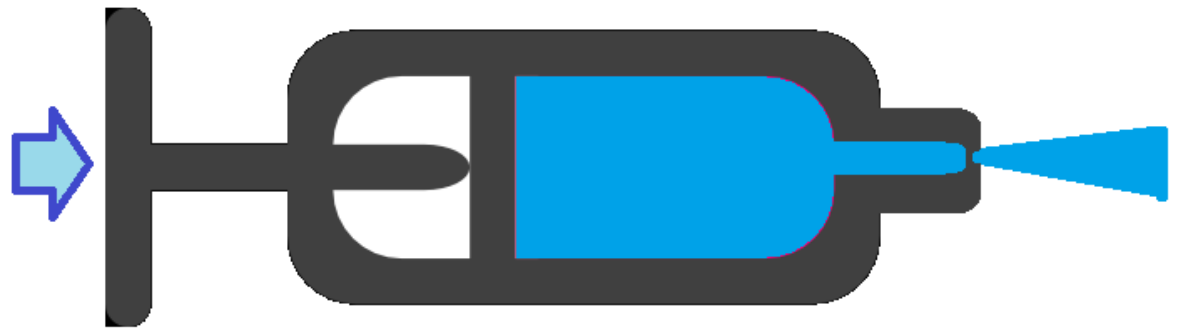
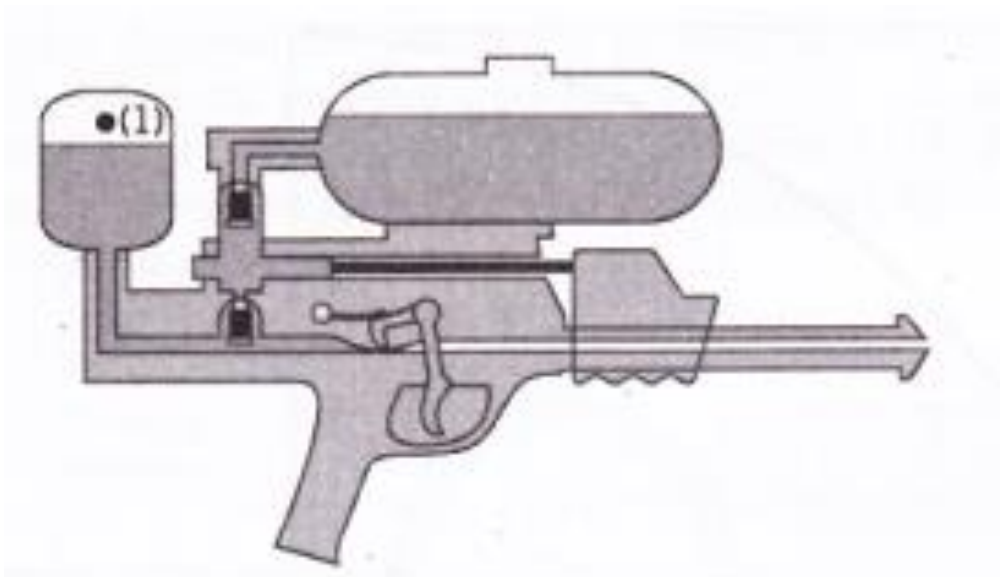
Water Guns



Water Guns



Water Guns



Pressure Cooking!

DEMONSTRATIONS

Cooking with Pressure

Stir Stick Smack

Poking Bottles

Upside-down Flask

DEMONSTRATIONS

Cooking with Pressure

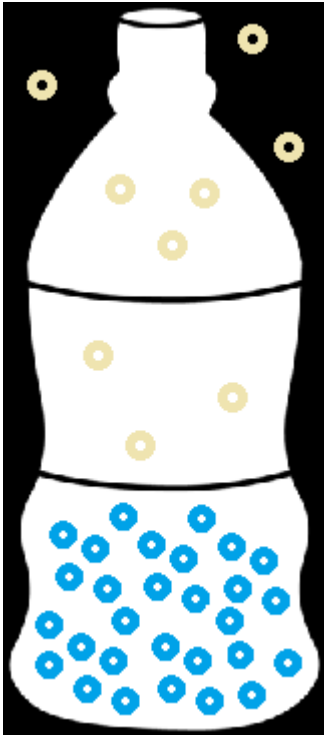
Stir Stick Smack

Poking Bottles

Upside-down Flask

Explanation

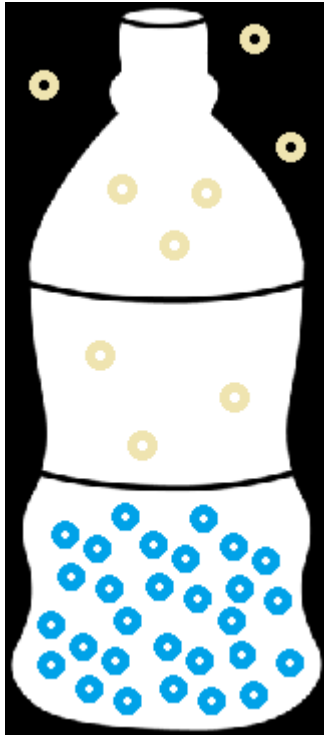
Open Lid



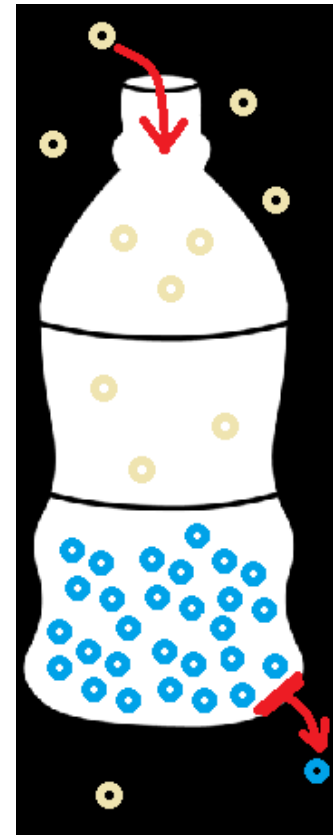
Poke a Hole



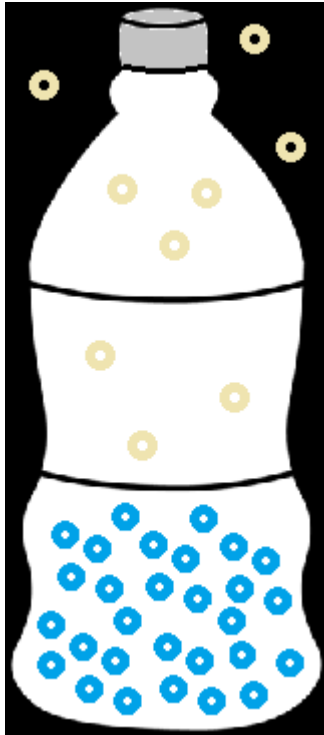
Open Lid



Poke a Hole



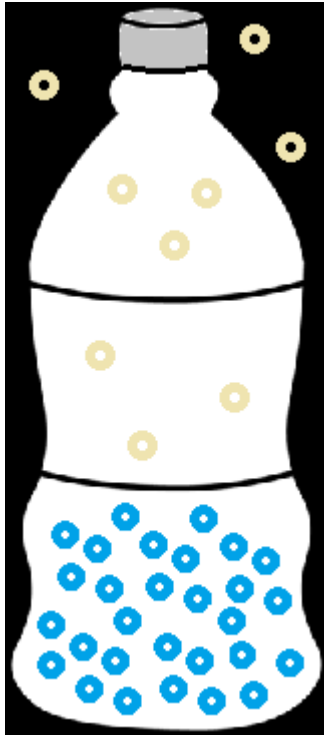
Closed Lid



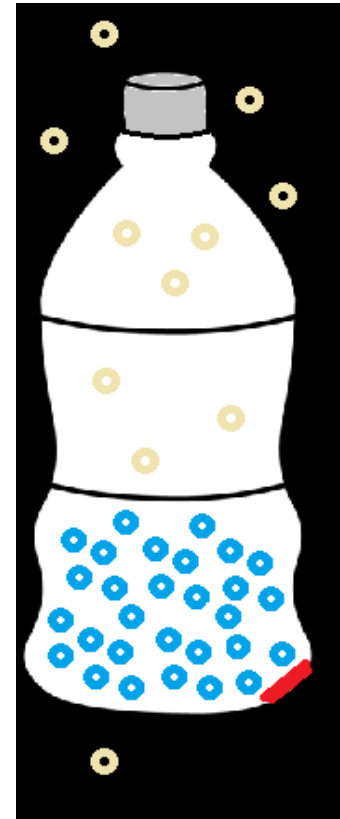
Poke a Hole



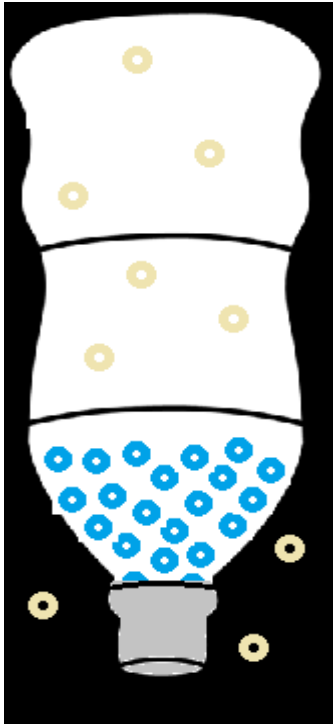
Closed Lid



Poke a Hole



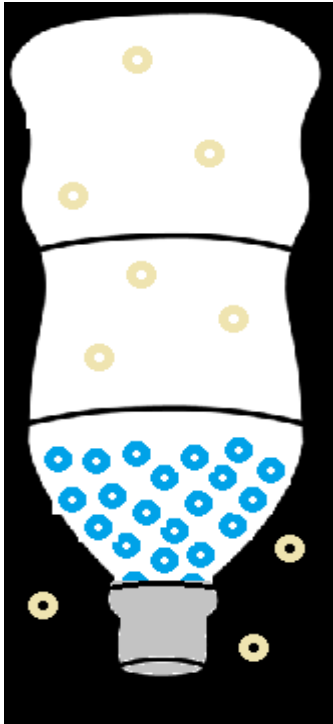
Larger Holes



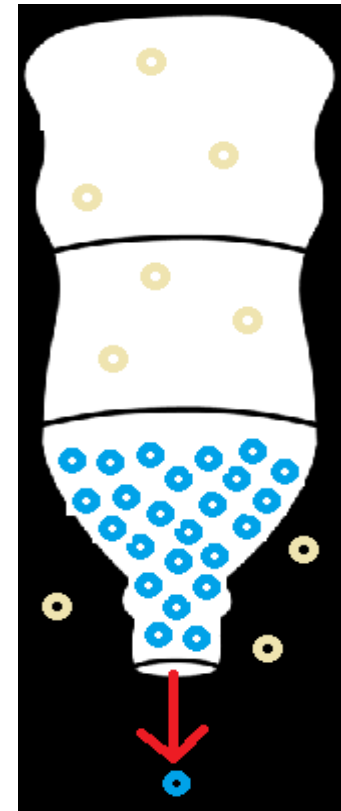
Remove Cap



Larger Holes



Remove Cap



DEMONSTRATIONS

Cooking with Pressure

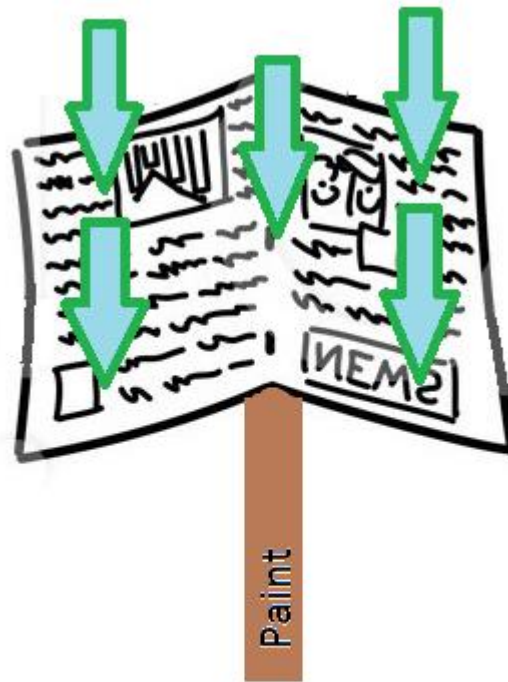
Stir Stick Smack

Poking Bottles

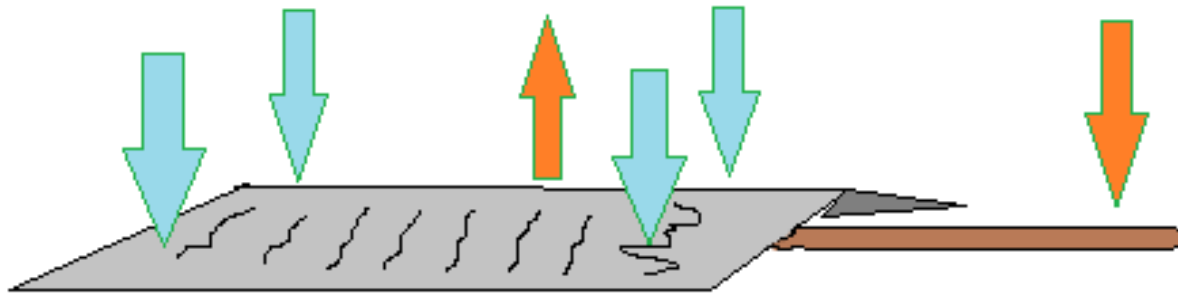
Upside-down Flask

Explanation

Atmospheric Pressure



Atmospheric Pressure



DEMONSTRATIONS

Cooking with Pressure

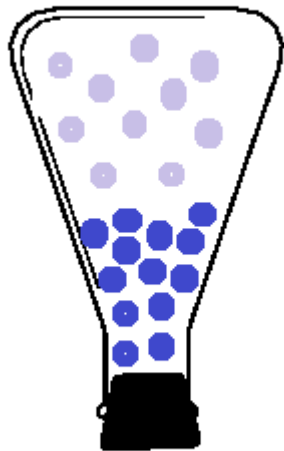
Stir Stick Smack

Poking Bottles

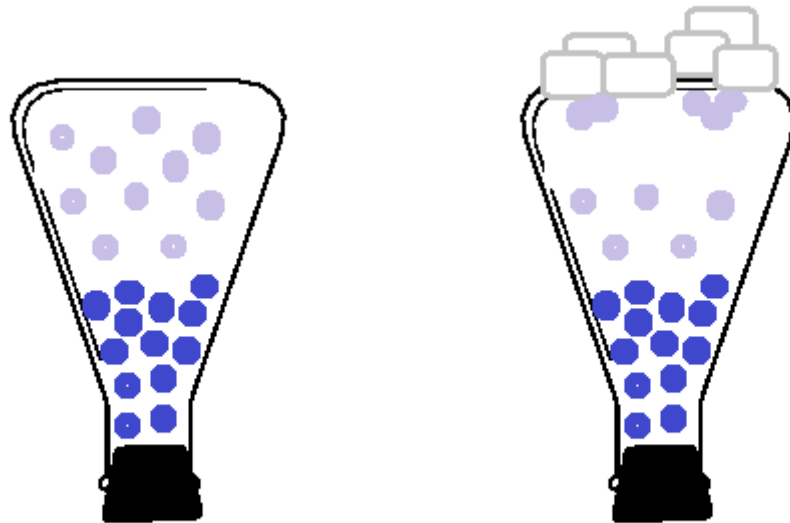
Upside-down Flask

Explanation

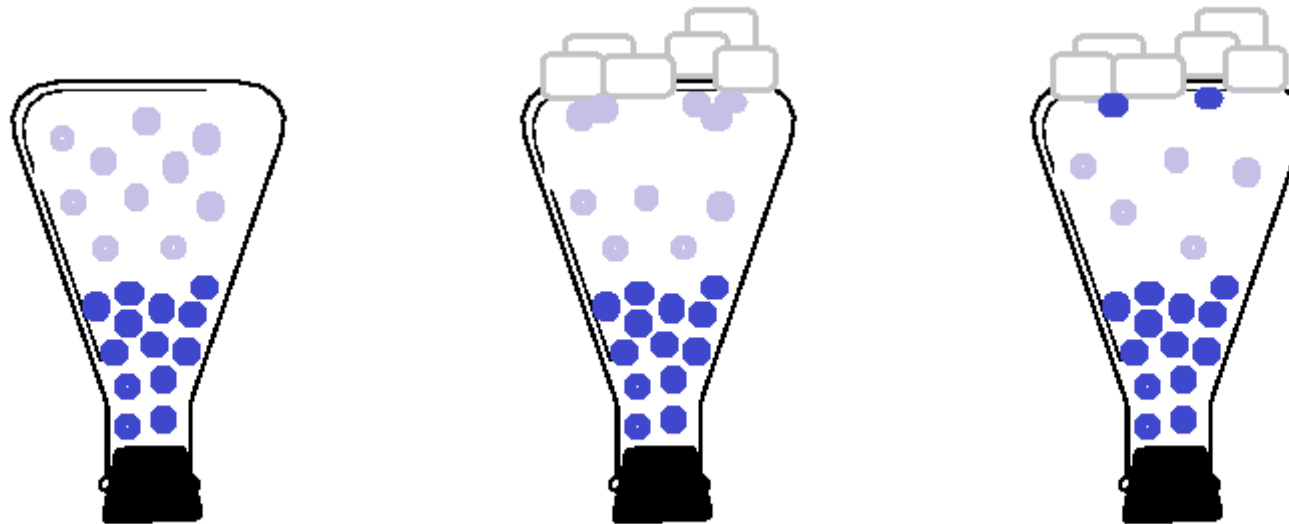
Lower Pressure



Lower Pressure



Lower Pressure



DEMONSTRATIONS

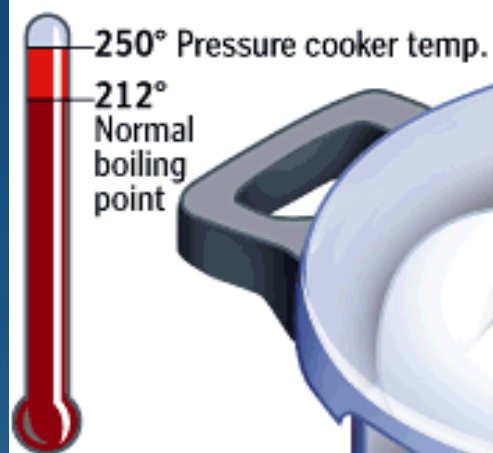
Cooking with Pressure

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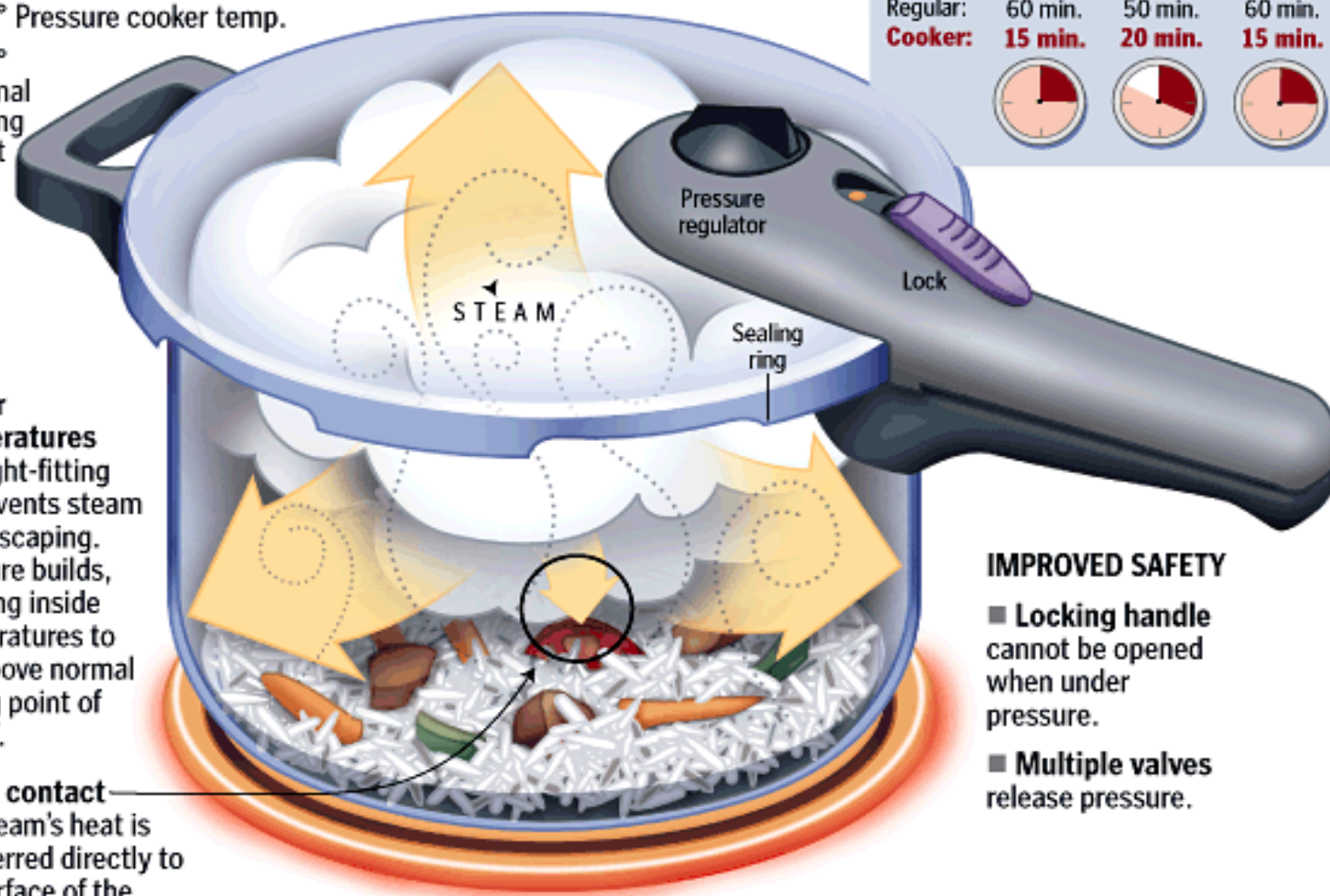
Upside-down Flask

Explanation



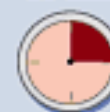
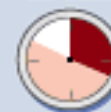
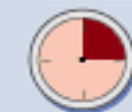
1 Higher temperatures
The tight-fitting lid prevents steam from escaping. Pressure builds, allowing inside temperatures to rise above normal boiling point of 212°F.

2 Direct contact
The steam's heat is transferred directly to the surface of the food.



COOKING TIMES (approximate)

	Whole chicken	Brown rice	Black beans
Regular:	60 min.	50 min.	60 min.
Cooker:	15 min.	20 min.	15 min.



IMPROVED SAFETY

- **Locking handle** cannot be opened when under pressure.
- **Multiple valves** release pressure.



Have a good day!