



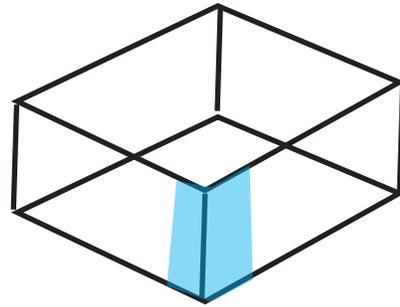
Gelatin Fracking Experiment

SUPPLIES

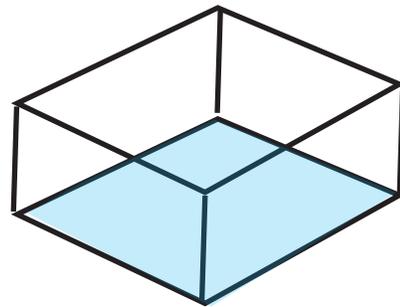
- 4x4 plastic container
- 2 pkgs gelatin
- blunt tipped syringe
- paper plate
- charcoal (in pill form)
- spoon
- small glass
- bowl to mix the gelatin in
- paper towels (to clean potential spills)
- roll of clear packing tape
- small plastic knife
- juice (like apple, white grape juice or another light juice, you can also use water)

INSTRUCTIONS

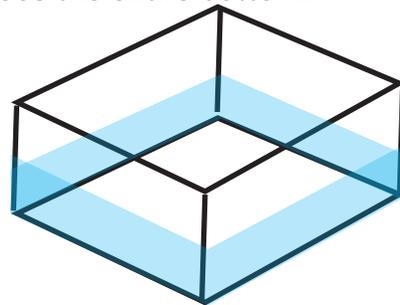
1. Gather all of your supplies.
2. Unfold the clear plastic box and put it together.
3. Using the clear packing tape, place a piece of tape along the side seam of the box. The seam is where the two sides of the box come together and looked glued. Wrap the bottom of the plastic box in the tape, sealing the corners and edges and anywhere the gelatin can leak from the bottom. Follow the diagram for placing your tape. Place the plastic box onto the plastic plate.



Tape the seam.



Tape across the entire bottom.



Tape around the sides.

Test your container by pouring a bit of water in. If its leaking lots of water, dump out the water and tape some more.

Remove all of the water when it stops leaking and move to the next step.

4. Prepare your gelatin according the directions on the package. To make this a tasty treat, replace the cold water with juice. Ask an adult for help with the boiled water. DO NOT use a stove or kettle without permission from an adult in you home.

5. Once the gelatin is cool to the touch, pour it into the clean plastic box and put it into the fridge to fully set.



6. Fill your glass with cool water and open the charcoal pill and dump it in.



7. Stir it very gently. Be careful not to spill as it can make a mess and stain the counter.



8. Using your syringe, draw up some of the charcoal water.



9. Bring the plastic cube full of gelatin out of the fridge.

fluid into the gelatin.

10. Inject the syringe into the gelatin about half-deep and with light pressure inject the charcoal fluid into the gelatin.

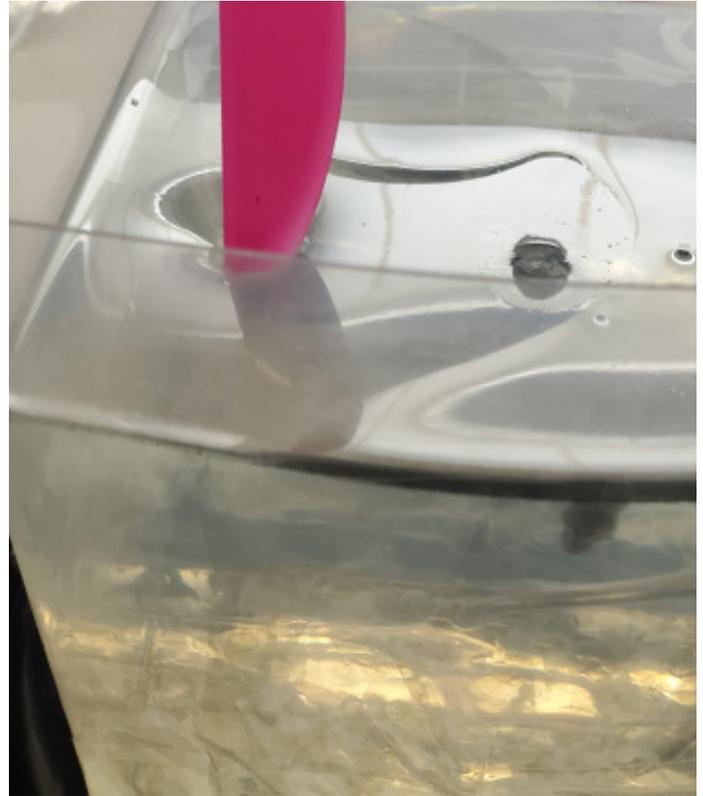


11. Fill up the syringe again and inject the syringe back into the gelatin in a different location and again about half-deep. With heavy pressure into the gelatin.



12. Take note of the differences between light and heavy pressure. Which do you think is used in fracking?

13. Using the plastic knife, make a small crevice in the gelatin (this will mimic existing cracks in rock).



14. Lightly inject more charcoal water into the rock cracks. What happened?

15. Inject fluid at the very bottom of the gelatin. What happened? What do you think would happen in real life?

16. Continue injecting the gelatin with the fluid until you run out (cause it's fun).

17. Throw the plate and gelatin box in the trash when you are finished. The syringe can be cleaned and used again for other experiments.