



GATEWAY REGION YMCA KIDNEY SIMULATION

Our kidneys remove harmful toxins from our blood and passing them out of our body via urine. The kidneys then send the purified blood back to the rest of our body. In this simulation, the coffee filter represents our kidneys, the chalk represents toxins and the water/food coloring represents our blood.

Supply List

- 2 clear cups
- ½ spoonful crushed chalk (chunky, doesn't need to be fine, just not a whole piece)
- Small bag (to crush chalk in)
- ½ cup of water
- Food coloring (any color) (if using colored chalk, do not need this)
- Coffee filter
- Rubber band or tape
- Spoon

Instructions

1. Crush the chalk using the plastic bag.
2. Mix the chalk and water in one of the clear cups
3. Add a few (4-5) drops of food coloring to the mixture (if using colored chalk, do not need this step)
4. Place the coffee filter over the top of the second unused cup and secure with rubber band or tape
5. Pour the chalk/water mixture through the coffee filter into the second cup

For more information about this activity visit:
gwrymca.org/blog/steam-activity-kidney-simulation



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