

NAME: PERIOD: DATE:

NATURE OF SCIENCE

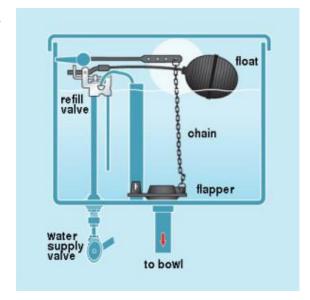
SYSTEMS CLASSWORK 3

Read the following. Then answer the questions.

"A toilet works by gravity: The water in the tank—just enough to fill the bowl—drops down and pushes waste through the drain.

The float drops, opening a valve that lets in water to refill the bowl and the tank simultaneously. The valve closes when the float rises far enough to shut off the water.

If the water from the tank can't leave the bowl fast enough, then the refill will spill over. To stop the refill action, take off the top of the tank, grab the float, and pull it up to close the valve. That should give you time to reach down and shut off the water, or at least wait for some of the water in the bowl to drain." – *This Old House*



1. Explain why you think this is a natural, man-made, or combination system. (2 sentence minimum)

- 2. **Explain** what you think is the *input* of this system is.
- 3. **Explain** what you think the *output* of this system is.



4. Describe two <i>processes</i> that are a part of this system.
5. Describe the <i>feedback mechanism</i> of this system and how it controls the system. (2 sentence minimum)
6. Explain why you think this is an open loop or closed loop system. (2 sentence minimum)