# **EXPERIMENT: TOILET PAPER CHALLENGE**

# Purpose:

Today you are going to be a scientist! The purpose of this experiment is to compare disintegration rates of commonly flushed items. Toilet paper is the only sewer approved item to be flushed down our toilets; therefore, toilet paper will be our control. We know it has been tested and it will break down properly every time. You are going to put each test sample through this experiment to prove whether it should be flushed or should not be flushed.

Hint: if the test sample **does not** disintegrate like toilet paper, then it should not be flushed down our toilets.

# Hypothesis:

What do you think will happen? List test samples in either column.

TEST SAMPLES THAT <b>WILL</b> DISINTEGRATE	TEST SAMPLES THAT <b>WILL NOT</b> DISINTEGRATE

# Materials:

- Clear jar = 1/test sample (ie: mason jar)
- Stirring stick = 1/test sample (ie: popsicle stick)
- Water (room temperature)
- Measuring cup (ie: 1 cup)
- Test samples (suggestions below)

<ul> <li>Dog Feces Bag</li> </ul>
<ul> <li>Q-Tips</li> </ul>
<ul> <li>Make-up Remover Pads</li> </ul>
Baby Wipes (non-flushable)
<ul> <li>Cotton Balls</li> </ul>

### Method:

- 1. Label jars according to the test sample names.
- 2. Put a stir stick in each jar.
- 3. Put a consistent amount of water in each jar. Water level should be just under the top of the jar.
- 4. Put each test sample in its labelled jar.
- 5. Stir each jar for a 5 second count. (ie: one-one-thousand, two-one-thousand...)
- After experiment is over, if possible, using the stir stick pull each test sample out of jar for observations.

## **Observations:**

Make any observations you see about each test sample.

BEFORE EXPERIMENT	AFTER EXPERIMENT

## Final Discussion Questions:

Did any test samples react like toilet paper?

Is there any difference between how the test samples looked before and after the experiment?

If the test samples did disintegrate, are the pieces approximately smaller than 5mmx5mm?

#### **WORD GLOSSARY**

**Approximately:** almost but not completely exact (an estimate).

Commonly: very often or frequently.

Compare: note the similarity or dissimilarity between two or more objects.

Consistent: done in the same way.

**Control:** a constant or unchanging standard.

**Disintegrate:** to break apart or decompose into small parts or particles. **Fair Testing Methods:** all conditions are kept the same for all test samples.

React: behave in a certain way in response to something.

