Lesson 6: Gross but Great Science — Exploring the Human Body with the National Geographic Gross Science Kit

Subject: Biology & Fun Science

Turn 'eww' into 'wow!' with hands-on experiments that teach kids about the human body, chemistry, and biology in the most memorable way possible — through safe, silly, and slimy science.

Learning Objectives

1. Understand key biological systems and reactions through sensory learning.
2. Develop curiosity about how the body works using tactile, kid-friendly experiments.
3. Apply the scientific method: hypothesize, test, and record results.
4. Encourage observation, discussion, and laughter while learning science safely.

Materials Needed

1. National Geographic Gross Science Kit
2. Disposable gloves and paper towels
3. Plastic table cover or tray
4. Notebook for observations
5. Optional: magnifying glass or camera for close-up photos

Lesson Procedure

1. Introduction: Discuss how our bodies produce interesting (and sometimes gross!) substances and why they serve important functions.
2. Experiment Choice: Pick 2–3 experiments (make slime, fake mucus, or dissect a model brain) and review directions together.
3. Observation: Ask questions during each step — 'What do you notice?' 'What changes?' 'Why might that happen?'
4. Data Collection: Record what happens to texture, color, and reaction time. Use descriptive, scientific vocabulary.
5. Compare & Contrast: Discuss which experiments were fast, sticky, or solid — and what caused the differences.
6. Reflection: Have learners explain one gross experiment and what real-life body process it models.

Discussion & Reflection

1. What makes some body reactions helpful instead of just gross?
2. Why is it important for scientists to study substances like mucus or bacteria?
3. What did you learn about how different materials react together?

Extensions & Activities

1. ELA Connection: Write a 'Gross Science Report' using descriptive words for textures, smells, and reactions.
2. STEM Challenge: Design your own safe 'gross' experiment using everyday materials (gelatin, vinegar, baking soda).
3. Art Integration: Draw a comic strip about your favorite gross experiment or create a 'Mad Scientist' poster.

Parent & Teacher Tips

1. Encourage kids to use science language instead of 'yuck!' when describing reactions.
2. Discuss how these experiments model real biological functions (digestion, mucus defense, chemical reactions).
3. Use humor and curiosity — this type of experiment builds engagement and long-term memory.
4. Take photos or videos of each step to document results and progress.

Wrap-Up

Gross science is memorable science. By exploring texture, smell, and reactions in a hands-on way, students turn curiosity into understanding — learning that biology and chemistry are all around us, even in the 'gross' stuff!