



DETERMINING HOW MICROGRAVITY AFFECTS WATER PURIFICATION VIA A COAGULANT-FLOCCULANT

SCHOOL: MCNEIL HIGH SCHOOL

LOCATION: AUSTIN, TX

FLIGHT PROVIDER: BLUE ORIGIN

GRADES: HIGH SCHOOL



STUDENT EXPERIMENT DESCRIPTION

Our experiment measures the effectiveness of a coagulant-flocculent purifying powder against gray water in microgravity. Water purification by coagulant could possibly save time, money, and energy in deep space explorations. Upon microgravity, we plan on releasing the powder via a spring-loaded modified syringe to mix with the water in a magnetic mixing chamber. The team will observe how flocculation is affected by gravity since it depends on gravitational forces to sink dense sediment groups.