More Scientific Method
5th grade

Overview
Students will review the process scientists go through to conduct an experiment. They will then create their own experiment on the probability of “heads-up” on a penny flip. *This program is recommended if students participated in I’m A Scientist, Too in a previous semester or year.

Vocabulary
- bias – prejudice in favor of or against one thing
- hypothesis – an intelligent/educated/good guess, your prediction

NM Science Standards Addressed
1-1-1-1 Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.
1-1-1-3 Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.
1-1-1-4 Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.
1-1-1-5 Communicate the steps and results of a scientific investigation.

CCSS Language Arts Standards Addressed
SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.
SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

Next Generation Science Standards
3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.