More Scientific Method
4th 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
1-1-1-2 Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how observation is interpreted.
1-1-1-3 Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.
1-1-2-1 Communicate ideas and present findings about scientific investigations that are open to critique from others.
1-1-3-1 Conduct multiple trials using simple mathematical techniques to make and test predictions.
1-1-3-2 Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.
3-1-1-4 Know that both men and women of all races and social backgrounds choose science as a career.

CCSS Language Arts Standards Addressed
SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
SL.4.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
SL.4.1.C Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
SL.4.1.D Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.