

Pre-trip preparation for

Measure Twice Cut Once – Grades 3-5

In this lab student knowledge of fractions will be enforced as they practice measurements in the standard systems. We will learn the use some of the important shop tool sand tool safety. Each student will use these skills to build a key hanger that they can take home.

Nevada Academic Content Standards in Science (NGSS)3-5.NF

Apply and extend previous understandings of multiplication and divisions to multiply and divide fractions.

During your Discovery Class students will be expected to:

- Sit in groups of 4 students per table.
- Students should be prepared to give their full attention to the Lab instructors when given the quiet signal.
- Work cooperatively with one another at the table.
- Follow the hands-on procedures just as the Lab teacher or assistant explains them.
- Handle materials and equipment carefully.

It is important that teachers and chaperones:

- Help focus the students' attention.
- Assist students with lab activities through questioning allowing the student to do the actual building
 and decision making. For example a parent might ask, "I see your base is shaky, what could you do
 to strengthen it?"
- Engage students at a higher level by asking open-ended questions throughout the class. For example: "Why did you choose __ ?"
- Turn off cell phones and other electronic devices during the class.

Literary connection:

To get students excited about the upcoming Discovery lesson we suggest reading experts from the following book with your students: How Big Is a Foot? by Rolf Myller. This book teaches students the importance of standard measurement by following the story of a king who wants to create a birthday gift for his queen.

