

Metric Olympics

1. _____: As scientists, we need to know how to take precise and accurate measurements.
2. _____: Scientists can use a _____ to measure mass, a _____ to measure volume, and a _____ to measure length and distance accurately.
3. _____:

Your hypothesis will be to make an estimate of the measurement for each event in the Metric Olympics BEFORE you take the actual measurement. Record this hypothesis in your data table.

4. _____:

Materials and Procedures: See Lab Station

5. DATA _____:

| <i>Event: Paper Plate Discus</i> | | | <i>Event: Straw Javelin</i> | | |
|--|--------|---|--|--------|--|
| Hypothesis (Estimate) | Actual | Score(Difference b/w actual and hypothesis) | Hypothesis (Estimate) | Actual | Score (Difference b/w actual and hypothesis) |
| | | | | | |
| cm | cm | | cm | cm | |
| <p>Question: The world record for the furthest discus thrown is 69.89 meters by Virgilijus Alekna. If 1 meter equals 100 cm. How many centimeters did Virgilijus throw the discus? (1 meter = 100 cm)</p> | | | <p>Question: Would you be able to throw the javelin further if you aimed above your head or if you aimed straight in front of you? Why do you think so?</p> | | |

Event: Right-Handed Marble Grab

| Hypothesis (Estimate) | Actual | Score (Difference b/w actual and hypothesis) |
|-----------------------|--------|--|
| g | g | |

Question: If you grabbed cotton balls instead of marbles how would the mass be different? Why? (Hint: would the mass of cotton balls be more or less than marbles?)

Event: Cotton Ball Shot Put

| Hypothesis (Estimate) | Actual | Score (Difference b/w actual and hypothesis) |
|-----------------------|--------|--|
| cm | cm | |

Question: Ilona Slupianek holds the record for furthest shot put at 22.41 meters. If there are 1000 mm in 1 m, how many millimeters did she throw the shot put?

Event: Big Foot Contest

| Hypothesis (Estimate) | Actual | Score (Difference b/w actual and hypothesis) |
|-----------------------|-----------------|--|
| Cm ² | Cm ² | |

Question: Would your measurement be more accurate if you measured the area of your notebook or the area of your foot? Why do you think so?

Event: Left-Handed Sponge Squeeze

| Hypothesis (Estimate) | Actual | Score (Difference b/w actual and hypothesis) |
|-----------------------|--------|--|
| mL | mL | |

Question: Which is more important for this event, having a strong hand or a big hand? Explain your answer.