

The STEM101 curriculum, aligned with ACT standards, provides students with hands-on experiences that deepen their understanding of Math, Science, English, Reading, and Writing, while also strengthening their problem-solving skills. By integrating real-world applications into academic concepts, students move beyond rote memorization and develop a practical, experiential grasp of key subjects tested on the ACT.

STEM101 kits allow students to measure, experiment, analyze data, and solve problems, simulating the way professionals work in STEM fields. Whether it’s applying measurement tools in geometry, conducting precision-based experiments in science, analyzing technical reading passages, or improving writing clarity through structured reports, students engage in active learning that reinforces ACT-tested skills.

By incorporating STEM101’s interactive approach, schools can empower students to enhance their ACT scores while simultaneously preparing them for college and career success through real-life, applied learning.



# **MATH:**

This unit reinforces **ACT Math skills** such as **scale models, unit conversions, and data analysis**. Students apply **algebraic reasoning and problem-solving** to real-world measurement tasks, improving their ACT performance and preparing for STEM careers.

# **📏 ACT-ALIGNED MEASUREMENT ACTIVITIES:**

 📌 **ACT Math Rating Scale – Measurement & Data Analysis**

**(16-19): Basic Measurement Skills**

**(20-23): Developing Estimation & Conversion Skills**

**(24-27): Proficient in Measurement & Scale Applications**

**(28-32): Strong Data Analysis & Measurement Application**

**(33-36): Advanced Mathematical & Analytical Reasoning**

## **🔢 ACT Math Activity 1: Scale Model & Measurement Calculations**

📌 **Objective:** Use **rulers, digital calipers, and tape measures** to create **scaled-down models** of real objects and apply measurement-related ACT math concepts.

📌 **Materials:**

* **Measurement tools:** Ruler, digital caliper, tape measure
* **Objects to measure:** A book, a phone, a shoebox, or a water bottle
* **Graph paper** for scaled drawings

📌 **Steps:**

1. **Measure the length, width, and height** of a real-world object using all **three tools** (ruler, caliper, tape measure).
2. **Create a scale drawing** at **half the size (1:2 scale)** of the original.
3. **Calculate the actual vs. scaled area and volume.**

**✔ Application & Analysis Questions**

* How does changing the scale factor affect the area and volume of an object?
* What challenges did you encounter when measuring with different tools, and how did they affect accuracy?
* How do unit conversions impact real-world engineering and design applications?

📌 **Mathematical Thinking Challenge:**

1. **A book measures 21 cm × 15 cm × 3 cm. If a student creates a model at a 1:2 scale, what is the new volume?** *(ACT Math Score: 24-27)*

A) 472.5 cm³

B) 236.25 cm³

C) 118.12 cm³

D) 59.06 cm³

**(Correct Answer: C – Volume = (21 × 15 × 3) ÷ (2³))**

1. **If a room measures 12 ft × 10 ft and its dimensions increase by 20%, what is the new area?** *(ACT Math Score: 28-32)*

A) 132 ft²

B) 144 ft²

C) 156 ft²

D) 172.8 ft²

**(Correct Answer: D– New area =**14.4×12 =172.8 ft2**)**

## **📐 ACT Math Activity 2: Estimating and Converting Measurements**

📌 **Objective:** This activity strengthens students’ unit conversion skills by applying them to real-world measurement problems. It enhances critical thinking through estimation, calculation, and verification while reinforcing fluency in converting between standard and metric units, key for ACT Math success.

✔ **Mathematical Thinking Challenge:**

* Why is it important to convert between different units of measurement accurately?
* How do estimation skills help in real-world problem-solving situations?
* What are some common errors students make when converting measurements?

✔ **Real-World Application Problem:** A company needs to order fabric for a project. Each roll of fabric is **2.5 meters long**, but the order form requires measurements in **feet**. If **1 meter = 3.28 feet**, how many feet of fabric are in each roll?

 A) 6.25 feet

B) 8.2 feet

C) 10.5 feet

D) 11.8 feet

 ***(Correct Answer: B – 2.5 × 3.28 = 8.2 feet per roll.)***

📌 **Instructions:**

* **Group Formation:** Divide students into small groups (2-3 members per group).
* **Problem Assignments:** Each group receives a **conversion challenge card** with a real-world scenario.
* **Estimation Round:** Before converting, students **estimate** the answer based on their understanding of unit relationships.
* **Calculation & Verification:** Students use the **provided conversion factors** to calculate the exact values and verify their answers using measurement tools.
* **Reflection & Discussion:** Groups present their findings, explaining their thought process, challenges faced, and strategies for avoiding conversion errors.

📌 **Materials Needed:**

* **Conversion reference sheet** with common unit conversions
* **Measurement tools** (rulers, tape measures)
* **Objects for real-world measurements** (e.g., books, classroom items)
* **Worksheet templates** for problem-solving

## **📊 ACT Math Activity 3: Data Analysis and Measurement Variability**

📌 **Objective:** This activity helps students analyze **measurement variability** and understand its impact on data interpretation. By calculating **mean, median, mode, and range**, students improve their ability to assess data accuracy. They will also develop skills in **interpreting and visualizing data** using graphs and statistical tools.

✔ **Mathematical Thinking Challenge:**

* How can multiple measurements of the same object differ, even when using the same tool?
* Why is it important to calculate the mean, median, and range when analyzing data?
* How does measurement variability impact real-world applications, such as quality control in manufacturing?

✔ **Applied Math Scenario:** A group of students measures the length of a pencil using a ruler. Their measurements are **15.2 cm, 15.4 cm, and 15.1 cm**. What is the mean length of the pencil?

A) 15.1 cm

B) 15.23 cm

C) 15.3 cm

D) 15.4 cm

(*Correct Answer: B – Mean = (15.2 + 15.4 + 15.1) ÷ 3 = 15.23 cm.)*

📌 **Mechanics:**

1. Students will measure the same object multiple times using a ruler and a tape measure.
2. They will record their results and calculate **mean, median, mode, and range**.
3. Discuss the significance of measurement variability and how to minimize errors.
4. Compare and interpret the data to understand measurement accuracy.

📌 **Things Needed to Prepare:**

* **Measurement tools:** Rulers, tape measures
* **Objects for measurement** (e.g., pencils, books, classroom items)
* **Graph paper or digital tools** to visualize data
* **Worksheet templates** for data analysis

**SCIENCE:**

Students develop **scientific reasoning and data analysis skills** by exploring **precision, accuracy, and experimental error**. Through hands-on experiments and data interpretation, they strengthen their ability to evaluate **measurement variability and sources of error**, essential for success on the **ACT Science section**.

📌 **ACT Science Rating Scale – Precision, Accuracy & Experimental Error**

**(16-19): Basic Understanding of Measurement Concepts**

**(20-23): Developing Experimental Analysis Skills**

**(24-27): Proficient in Scientific Data Interpretation**

**(28-32): Strong Scientific Reasoning & Analysis**

**(33-36): Advanced Experimental Design & Evaluation**

**🔬ACT Science Activity 1: Precision, Accuracy & Experimental Error**

📌 **Objective:** This activity helps students understand the difference between **precision and accuracy** in scientific measurements. By using **rulers, tape measures, and digital calipers**, students will compare measurement tools, analyze discrepancies, and evaluate sources of **experimental error**. This hands-on approach strengthens **critical thinking, data interpretation, and problem-solving skills**, preparing students for ACT Science questions that require analyzing and interpreting data trends.

📌 **Materials:**

* Ruler, tape measure, digital caliper
* Small wooden block (or any flat object)
* Recording sheet for measurements

📌 **Steps:**

1. **Measure the same object** three times using each tool and record the results.
2. **Calculate percentage error** compared to a reference value.
3. **Graph results** analyze variations in tool precision.

📌 **Application and Analysis Questions**

* Why is it important to use precise and accurate measurements in scientific experiments?
* How do different measurement tools affect the accuracy of collected data?
* What factors contribute to experimental error, and how can they be minimized?

📌 **Science Thinking Challenge:**

1. **A student measures a block as 10.2 cm using a ruler but the actual length is 10.5 cm. What is the percent error?** *(ACT Science Score: 20-23)*
	1. 1.2%
	2. 2.9%
	3. 3.5%
	4. 5.1%
	5. **(Correct Answer: B – Percent Error = (|10.5 - 10.2| / 10.5) × 100)**
2. **A student uses a digital caliper and a ruler to measure the same object but gets different results. What is the most likely cause?** *(ACT Science Score: 24-27)*
	1. The ruler is always more accurate.
	2. The caliper measures more precisely than the ruler.
	3. The ruler has a lower resolution.
	4. The caliper is likely broken.
	5. **(Correct Answer: B & C – Higher precision tool measures more accurately.)**

## **🔍 ACT Science Activity 2: Measuring Density and Material Identification**

📌 **Objective:** This activity helps students understand how to measure **mass and volume** accurately to calculate **density**. By comparing results to known values, students develop **data analysis and critical thinking skills**, reinforcing the importance of **precision and accuracy** in scientific measurements.

✔ **Science Thinking Challenge:**

* How does measurement precision impact density calculations?
* Why is density an important property in material science and engineering?
* How can density be used to identify unknown substances?

✔ **Applied Science Problem:** A student measures a metal cube with a **digital caliper** and finds its volume to be **8 cm³**. Using a digital scale, the mass is determined to be **64 grams**. What is the density of the cube?

A) 2 g/cm³

B) 4 g/cm³

C) 8 g/cm³

D) 10 g/cm³

*(Correct Answer: C – Density = mass/volume = 64g ÷ 8cm³ = 8 g/cm³.)*

📌 **Mechanics:**

1. Provide students with different objects (e.g., metal, plastic, and wood samples).
2. Students measure the **mass using a scale** and **volume using rulers or calipers**.
3. Calculate density using **Density = Mass ÷ Volume** and compare to reference values.
4. Discuss how accuracy in measurements affects the reliability of density calculations.

📌 **Things Needed to Prepare:**

* **Measurement tools:** Digital calipers, rulers, scales
* **Objects of different materials** (metal, plastic, wood)
* **Reference sheet with known densities**
* **Worksheet templates for calculations**

## **🌡️ ACT Science Activity 3: Temperature and Expansion Measurements**

📌 **Objective:** This activity helps students understand how **temperature changes affect material expansion and contraction**. By using precise measurement tools, students will track small length changes and analyze the relationship between **temperature and material properties** in real-world applications like engineering and construction.

✔ **Science Thinking Challenge:**

* How does temperature affect the dimensions of different materials?
* Why do engineers need to account for thermal expansion in construction?
* What are some real-world applications of thermal expansion principles?

✔ **Applied Science Problem:** A metal rod is **10.0 cm long** at **20°C**. After being heated to **100°C**, its length increases to **10.2 cm**. What is the percentage increase in length?

A) 0.5%

B) 1.0%

C) 2.0%

D) 5.0%

**(Correct Answer: c– Percentage Increase = [(10.2 - 10.0) ÷ 10.0] × 100 = 2.0%)**

📌 **Mechanics:**

1. Students measure the length of metal and plastic rods at **room temperature**.
2. The rods are gently heated using a **safe heat source** (e.g., warm water, heat lamp).
3. Students measure and record the new length to determine expansion.
4. Discuss why different materials expand at different rates and how this affects engineering design.

📌 **Things Needed to Prepare:**

* **Measurement tools:** Digital calipers, rulers
* **Metal and plastic rods**
* **Safe heat source (hot water, heat lamp)**
* **Worksheet templates for data collection**

**READING:**

This unit enhances **ACT Reading skills** by engaging students with **technical texts, data tables, and scientific claims**. By analyzing measurement-related reading materials, students improve their ability to **interpret complex information, evaluate arguments, and synthesize data**, preparing them for the **ACT Reading section**.

📌 **ACT Reading Rating Scale – Analyzing Technical Texts & Scientific Claims**

**(16-19): Basic Comprehension of Technical Texts**

**(20-23): Developing Analytical Reading Skills**

**(24-27): Proficient in Technical Analysis & Data Interpretation**

**(28-32): Strong Evaluative & Comparative Reasoning**

**(33-36): Advanced Critical Reading & Scientific Argumentation**

## **📖 ACT Reading Activity 1: Analyzing Technical Texts**

📌 **Objective:** This activity strengthens students’ ability to **interpret technical diagrams, measurement instructions, and data tables**. By analyzing complex instructions, they improve **reading comprehension, precision in following steps, and real-world problem-solving skills** relevant to ACT success. by interpreting **technical diagrams, measurement instructions, and data tables**. By breaking down complex instructions, students improve their ability to extract key information, follow precise steps, and apply their understanding to real-world scenarios.

📌 **Steps:**

1. **Read the passage carefully**, identifying key terms.
2. **Analyze the table comparing tools** and match each tool with the correct use case.
3. **Answer ACT-style reading comprehension questions.**

📌 **Technical Passage: Understanding Measurement Tools**

Accurate measurement is essential in science, engineering, and construction. Three commonly used tools for measuring length and dimensions are **rulers, digital calipers, and tape measures**. Each tool serves a distinct purpose, offering different levels of **precision and accuracy** depending on the measurement needs.

A **ruler** is a basic tool used for measuring straight-line distances. Typically marked in **inches and centimeters**, rulers are convenient for quick measurements but may lack precision for very small or curved objects. Their accuracy is limited by the smallest marked unit, usually **millimeters or 1/16 of an inch**.

A **digital caliper** provides much greater precision than a ruler. It is commonly used in engineering and manufacturing, capable of measuring objects to **the nearest 0.01 mm**. Unlike rulers, digital calipers can measure both **external and internal dimensions** with high accuracy. The digital display minimizes human error, making calipers ideal for applications requiring exact specifications.

A **tape measure** is designed for measuring longer distances and larger objects, such as furniture, rooms, or construction materials. Unlike a ruler or caliper, a tape measure is **flexible and retractable**, making it suitable for measuring curved or irregular surfaces. However, its precision is generally lower than that of a digital caliper, as its smallest unit is typically **1/16 of an inch or 1 mm**.

Understanding the appropriate tool for a given task is crucial in **fields like engineering, architecture, and scientific research**. Choosing the right instrument improves **measurement accuracy, reduces error, and ensures consistency** in calculations and technical applications.

## **📏 Table: Comparing Measurement Tools**

|  |  |  |  |
| --- | --- | --- | --- |
| **Measurement Tool** | **Accuracy** | **Precision** | **Common Uses** |
| **Ruler** | ±1 mm | Low | Basic length measurements, school projects |
| **Tape Measure** | ±1 mm – 5 mm | Medium | Measuring large objects, construction, furniture sizing |
| **Digital Caliper** | ±0.01 mm | High | Engineering, machining, small object measurements |

📌 **ACT-Style Reading Questions:**

1. **Based on the passage, which tool is best for measuring the diameter of a small screw?** *(ACT Reading Score: 20-23)*
	1. Ruler
	2. Tape Measure
	3. Digital Caliper
	4. Protractor
	5. **(Correct Answer: C – Digital calipers provide high precision for small objects.)**
2. **Why might an engineer prefer a digital caliper over a tape measure?** *(ACT Reading Score: 24-27)*

📌 **Materials:**

* **Technical passage** explaining the differences in measurement tools
* **Table comparing** accuracy, precision, and common uses of each tool

## **📖 ACT Reading Activity 2: Evaluating Scientific Claims in Measurement**

📌 **Objective:** This activity helps students evaluate **scientific arguments and conflicting viewpoints** related to measurement accuracy and precision. By analyzing two differing perspectives, students develop **critical reading and reasoning skills** essential for ACT success.

📌 **Instructions:**

1. Provide students with two short excerpts presenting different viewpoints on measurement tools.

**Excerpt 1 (Supporting Digital Calipers):** Digital calipers are the preferred choice for high-precision tasks in engineering and machining. They provide accurate readings down to **0.01 mm**, making them ideal for measuring small components. However, they require careful handling and calibration to maintain accuracy.

**Excerpt 2 (Supporting Tape Measures):** Tape measures are widely used in construction and home improvement due to their **ease of use and flexibility**. While they are not as precise as digital calipers, their ability to measure long distances quickly makes them essential in many fields. The trade-off is a higher chance of human error due to misalignment.

1. Have students analyze both excerpts and answer **critical thinking questions**:
	1. What are the strengths and limitations of each measurement tool?
	2. Which tool is more suitable for precision tasks, and why?
	3. How do different industries prioritize accuracy versus convenience in measurement?
2. Discuss how evaluating **scientific claims and technical arguments** applies to real-world problem-solving.

📌 **Things Needed to Prepare:**

* Printed **excerpts** for students to read
* Worksheet with **analysis questions**
* Comparison chart of **digital calipers vs. tape measures**

**WRITING:**

Students strengthen **technical writing and argumentative reasoning** by crafting structured essays on **precision and accuracy in measurement**. By analyzing real-world applications in **engineering, medicine, and construction**, they develop **logical organization, evidence-based reasoning, and clarity in argumentation**, aligning with **ACT Writing standards**.

📌 **ACT Skills & Rating Scale:**

* **(16-19):** Organizing ideas logically
* **(20-23):** Supporting claims with evidence
* **(24-27):** Using data-driven reasoning
* **(28-32):** Addressing counterarguments
* **(33-36):** Writing complex, structured technical arguments

## **📝 ACT Writing Activity 1: Precision in Real-World Applications**

📌 **Objective**: This activity focuses on the importance of **precision and accuracy in real-world applications**, emphasizing how small errors can lead to significant consequences. Students will analyze case studies, evaluate real-world examples, and write argumentative essays discussing the impact of precision in **engineering, medicine, and technology**.

📌 **ACT Writing Prompt:**
*"Some argue that approximate measurements are acceptable in most applications, while others believe precision is critical. Write an essay defending one side, using real-world examples."*

📌 **ACT Writing Structure:**

1. **Introduction:** State the argument for or against precision.
2. **Body Paragraphs:**
	1. Use real-world examples (e.g., engineering, medicine, space exploration).
	2. Include data from your own measurement experiments.
3. **Counterargument:** Address the opposing view.
4. **Conclusion:** Summarize key points and emphasize why precision matters.

## **✍️ ACT Writing Activity 2: Writing a Procedural Guide**

📌 **Objective:** This activity helps students develop **technical writing skills** by creating clear and precise procedural guides. Students will practice structuring step-by-step instructions while improving clarity and coherence in writing.

📌 **Instructions:**

1. Assign students a measurement tool (ruler, tape measure, or digital caliper) and ask them to write a **step-by-step guide** on how to use it accurately.
2. Have them include **common errors to avoid** and best practices for precise measurement.
3. Students exchange guides with a partner, who follows the instructions and provides feedback on clarity and effectiveness.
4. Discuss the importance of **clear procedural writing** in technical fields and how it relates to ACT Writing.

📌 **Things Needed to Prepare:**

* Measurement tools (rulers, tape measures, digital calipers)
* Sample procedural guides for reference
* Peer review checklist

## **✍️ ACT Writing Activity 3: Argumentative Essay on Measurement Accuracy**

📌 **Objective:** This activity enhances students’ **persuasive writing and critical thinking skills** by having them construct an argument about the importance of measurement accuracy in various fields.

📌 **Instructions:**

1. Present students with the following prompt: *“In industries such as engineering, healthcare, and construction, precision in measurement is critical. Write an essay arguing whether digital measurement tools should replace traditional manual tools in all professional settings.”*
2. Students must take a stance, provide **supporting evidence**, and address **counterarguments**.
3. After writing, students will participate in a **peer review session**, evaluating each other’s use of evidence and argument structure.
4. Conclude with a discussion on how **logical reasoning and structured writing** contribute to success in ACT Writing.

📌 **Things Needed to Prepare:**

* Essay prompt handouts
* Rubric for evaluating argument structure and clarity
* Peer review worksheets

**ENGLISH:**

Students refine **editing and revision skills** by improving technical writing clarity and structure. By analyzing and correcting **measurement-related reports**, they develop **sentence fluency, grammar accuracy, and logical organization**, aligning with **ACT English standards**.

📌 **ACT Skills & Rating Scale:**

* **(16-19):** Identifying grammar errors
* **(20-23):** Improving sentence clarity
* **(24-27):** Revising for conciseness
* **(28-32):** Editing technical writing for clarity
* **(33-36):** Refining advanced explanations

## **🖊️ ACT English Activity 1: Editing a Technical Report**

📌 **Objective**: This lesson focuses on **editing and revising technical writing**, a critical skill for **ACT English** and real-world STEM applications. Students will review a sample **technical report on measurement and data analysis**, identifying **grammatical errors, unclear wording, and structural issues**. By improving sentence clarity and logical flow, students will develop their ability to communicate technical information effectively.

📌 **ACT-Style Grammar Fix:**

* **Original:** "The caliper and the tape measure is both useful tools."
* **Corrected:** "The caliper and the tape measure **are** both useful tools." *(ACT English Score: 16-19)*

📌 **Instructions:**

1. Read the provided technical report on measurement and data analysis carefully.
2. Identify grammatical errors, unclear wording, and structural issues within the text.
3. Rewrite sentences to improve clarity, coherence, and technical accuracy.
4. Ensure that measurement terminology and data interpretations are precise and logically presented.
5. Review your edits and discuss improvements as a group or class.

**Introduction** The purpose of this experiment is about measuring objects using three different tools which is ruler, a tape measure, and digital calipers. The objective was to understand precision and accuracy, and how errors can be different when using different instruments.

**Methodology** First, each group choose an object to measure. They took three measurements of the object’s length, width, and height with a ruler, a tape measure and a digital caliper. All measurements were wrote down in a table for later analysis. The digital caliper was used last because it is the most precise but also difficult to handle compared to the others.

**Results and Discussion** The data collected showed different levels of precision between the three measurement tools. The tape measure had the largest differences between measurements, probably because of it’s flexibility and human error. The ruler was more consistent, but it could only measure to the nearest millimeter. The digital caliper, however, provided highly precise values, with very small variations between measurements. It was observed that digital calipers is the most accurate tool in our experiment.

Also, errors in measurement was found. Some groups did not align the ruler correctly, which led to incorrect values. Additionally, slight variations happened because students measured at different angles. From these results, it can be assumed that accuracy is not only about the tool being used but also how well the user applies it.

**Conclusion** In conclusion, this experiment demonstrated how different measurement tools provide different levels of accuracy. The digital caliper was the best tool for precise measurements. However, accuracy depends on the user’s technique and consistency of method. In real world applications,

📌 **Follow-Up Activity: Writing a Revised Technical Report**

1. After editing the provided technical report, students will write a **fully revised version** with improved clarity, structure, and grammar.
2. Each student or group will **incorporate technical accuracy**, ensuring measurement terms and data interpretations are precise.
3. Students will present their revised reports to the class and explain the **key changes they made** and how these improvements enhance readability and professionalism.
4. The class will discuss **why clear and precise technical writing** is essential in STEM fields and how this skill connects to the **ACT English section.**

## **✍️ ACT Editing Activity 2: Editing and Improving Technical Writing**

📌 **Objective:** This activity enhances students' **editing and proofreading skills** by improving clarity, grammar, and structure in technical writing.

📌 **Instructions:**

1. Provide students with a **poorly written technical report** on measurement procedures.
2. Students will identify **grammatical errors, unclear wording, and structural weaknesses**.
3. Have them rewrite the report using **precise language and logical flow**.
4. Discuss how **effective technical writing** improves communication in STEM fields and on the ACT English section.

📌 **Sample Technical Report with Errors**

**Introduction**
This experiment purpose is to measure objects using ruler, tape measure, and digital caliper. The goal was understanding about precision and accuracy and why measuring tools can sometimes show different results.

**Methodology**
First, each group was choosing a object to measure. They take three measurement for length, width, and height with the ruler, tape measure and digital caliper. Every measurements was wrote down in a chart to analysis later. The digital caliper was use last because it has most precision but also more difficult for handling than others.

**Results and Discussion**
The datas collected show different level of precision between measurement tools. The tape measure had bigger differences in result, maybe because it’s flexible and hard to make straight. The ruler was better but it could only measure to nearest millimeter. The digital caliper give very exact values, with very small different between measures. It was observed that digital calipers is most accurate.

Also, mistake in measurement was found. Some groups not put ruler correctly, which led to incorrect values. Other groups measured at angle, making variation in results. It can be assuming that accuracy not only about tool but also the person measuring.

**Conclusion**
In conclusion, this experiment show how different measurement tools provide different level of accuracy. Digital caliper was best tool for precise measurement, but accuracy depend on user technique and method consistency. In real world, choosing the right tool is very important to get correct measurements.

📌 **Things Needed to Prepare:**

* Sample technical report with errors
* Editing checklist
* Peer review worksheet

### **📖 ACT English Activity 3: Sentence Clarity in Technical Writing**

📌 **Objective:** This activity helps students refine **sentence clarity and conciseness** in technical writing by rewriting poorly structured measurement-related sentences.

📌 **Instructions:**

1. Provide students with **wordy or unclear technical sentences** related to measurement.
2. Have them rewrite the sentences using **concise, precise, and grammatically correct language**.
3. Discuss how sentence structure and word choice impact **technical communication and ACT English scores**.

📌 **Example:** **Original:** "The ruler, which was used by the student for measuring the object’s length, was sometimes not aligned properly, which resulted in errors in the measurements."

**Revised:** "Misalignment of the ruler led to measurement errors."

📌 **Things Needed to Prepare:**

* List of **wordy or unclear sentences**
* Editing worksheet
* Peer review checklist

### **🌟 Why These Activities Work**

✅ **Hands-on use of measurement tools**
✅ **ACT-aligned problem-solving**
✅ **Real-world STEM applications**