

Reading the Micrometer

Summary

This is a packet that was developed as an activity to introduce students to reading the micrometer. It covers the parts of the micrometer, how to read the micrometer, and some basic math review. After students have successfully completed the packet, they proceed with a introductory machine lathe activity.

Time Frame

2 class periods of 45 minutes each

Group Size

Pairs

Life Skills

Thinking & Reasoning, Communication, Employability

Materials

A couple of micrometers that can be used between three or four students. The worksheets need to be copied for the class.

Background for Teachers

This is an introduction to reading the micrometer. It does not include metric or digital micrometers. Teachers need to know how to read the micrometer in order to help students with problems that students may encounter.

Student Prior Knowledge

It is helpful for the student to be able to compute simple math (addition and subtraction).

Intended Learning Outcomes

The ability to read the micrometer, and apply this knowledge to turn stock on a lathe within a specified tolerance.

Instructional Procedures

Students each do their own packet, and are allowed to help each other within their own group. Each group needs a micrometer and I have my groups staggered so that all the students are not doing this at once....they will all do this activity over a one month period. They are rotating to the activity.

Strategies for Diverse Learners

Keep the students in a group and have the sharper students help the slower students on this activity. Change the tolerance in the lathe activity (that follows this packet) where they apply the micrometer knowledge. Make it easier for beginners (like +/- .025) and for sharper students tighten up the tolerances.

Assessment Plan

The quiz is attached with the micrometer lesson.

Authors

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