

Program: Agribusiness

Instructor: Lucas McCollum

Course Title: Exploring Agriscience

Date:	June 15, 2010						
Lesson Length:	3 – 5 days						
Topics:	Reading and understanding the Ruler.						
OVERVIEW / ANNOTATION: This lesson is used to instruct students in the use of a standard "English" ruler for determining measurements. The students will read a standard ruler accurately to the nearest 1/16 of an inch. The student will measure different items to gain proficiency in measuring.							
BACKGROUND / PREPARATION: Experience in using and reducing fractions is helpful, but not essential.							
PRIMARY LEARNING OBJECTIVES: Reading a basic ruler and measure tape to perform. Reduction of fractions and converting fractions into decimal form will also be covered. Adding and subtracting fractions will also be introduced.							
ESSENTIAL QUESTION(S): Can you count money? Do you know how many quarters make a dollar? How do you write a quarter (25 cents) in decimal form? So, what is the difference in counting money and reading a ruler?							
MATERIALS, EQUIPMENT AND TECHNOLOGY RESOURCES							
x	Textbook	x	Lab Manual		Video		Other Work sheets Measuring tools
	Adv. Committee		Posters		Multi-Media		
	Speaker		Supplemental Materials		Internet		
CONTENT STANDARDS & TASKS: <i>Alabama Course of Study</i> COS – 19							
PROCEDURES, ACTIVITIES, AND LEARNING EXPERIENCES							
x	Individual work	x	Group Work	x	Lecture		Skills USA
x	Class Discussion	x	Project		Speaker		Live Work
x	Visuals	x	Review		Video		
x	Homework	x	Handout		Field Trip		
ASSESSMENT STRATEGIES							
x	Homework		Portfolio	x	Class Work	x	Test
x	Teacher Observation		Other:	x	Performance		Feedback from Discussion
LESSON INSTRUCTION INCLUDES:							
	Safety Instruction		Presentation	x	Higher Order Reasoning		
x	Project-Based Learning		Role Playing		Work Ethics		
	Integrated Academics	x	Simulation		Integrated CTSO Experiences		

Employability Skills	x	Problem Solving Skills	x	Management Skills
TEAMWORK ACTIVITIES: Students will be given 10 blocks of wood in various length and work together to a) find the length of each, b) reduce improper fractions to lowest terms, and c) total the length of blocks labeled 1 – 5 by adding the fractions.		PROVISIONS FOR INDIVIDUAL DIFFERENCES: Provide multiple choice answers and try to pair up with advanced students		
AVAILABLE STUDENT INDUSTRY CREDENTIALS:				
COURSE / PROGRAM CULMINATING PROJECT:				

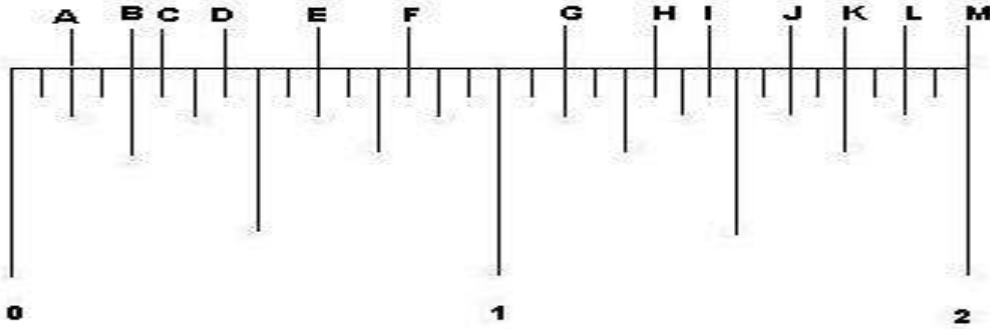
**See Student Measurement Worksheet attached below!!

Standard Measurement Worksheet 1

Name _____ Date _____ Score _____

Please write the correct measurement in lowest terms next to the corresponding letter below. Don't forget to give the distance of the measurement for each answer.

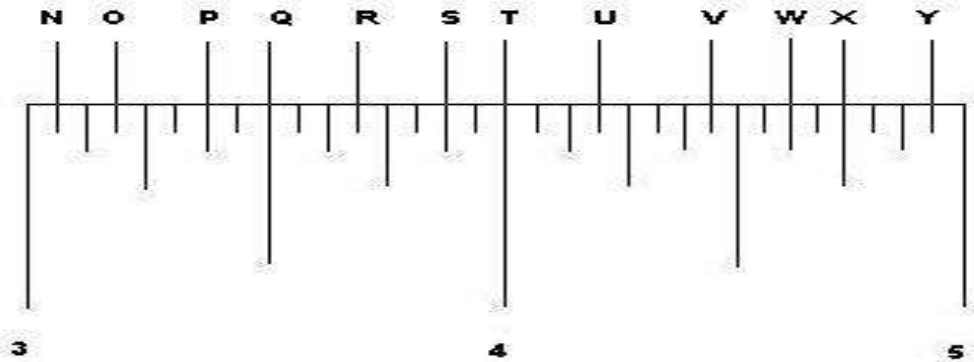
(Ex. in. or “)



A. _____
 B. _____
 C. _____
 D. _____
 E. _____

F. _____
 G. _____
 H. _____
 I. _____
 J. _____

K. _____
 L. _____
 M. _____



N. _____
 O. _____
 P. _____
 Q. _____
 R. _____

S. _____
 T. _____
 U. _____
 V. _____
 W. _____

X. _____
 Y. _____

- A. $1/8''$
- B. $1/4''$
- C. $5/16''$
- D. $7/16''$
- E. $5/8''$
- F. $13/16''$
- G. $1-1/8''$
- H. $1-5/16''$
- I. $1-7/16''$
- J. $1-5/8''$
- K. $1-3/4''$
- L. $1-7/8''$
- M. $2''$

- N. $3-1/16''$
- O. $3-3/16''$
- P. $3-3/8''$
- Q. $3-1/2''$
- R. $3-11/16''$
- S. $3-7/8''$
- T. $4''$
- U. $4-3/16''$
- V. $4-7/16''$
- W. $4-5/8''$
- X. $4-3/4''$
- Y. $4-15/16''$

Add the following fractions:

1. $1/8 + 1/8$
2. $1/4 + 1/2$
3. $1/16 + 1/4$
4. $5/8 + 3/16$
5. $1\frac{1}{2} + 1\frac{1}{4}$

Answers

1. $2/16$ reduces to $1/8$
2. $3/4$
3. $5/16$
4. $13/16$
5. $2\frac{3}{4}$

Subtract the following fractions

6. $5/16 - 3/16$
7. $3/4 - 1/2$
8. $1\frac{3}{4} - 9/16$
9. $3\frac{15}{16} - 3/8$
10. $4\frac{5}{8} - 1\frac{4}{8}$

Answers

6. $2/16$ reduces to $1/8$
7. $1/4$
8. $1\frac{3}{16}$
9. $3\frac{9}{16}$
10. $3\frac{1}{8}$