



WEST SHORE SCHOOL DISTRICT
Intro/Measuring Learning Module

Title of Module	6 th grade Intro/Measuring	Grade Level	6
Curriculum Area	Technology Education	Time Frame	1 week

Desired Results

Science and Engineering Practices	Crosscutting Practices
<ol style="list-style-type: none"> 1. Asking questions and defining problems. 2. Developing and using models. 3. Planning and carrying out investigations. 4. Analyzing and interpreting data. 5. Using mathematics and computational thinking. 6. Constructing explanations and designing solutions. 7. Engaging in argument from evidence. 8. Obtaining, evaluating and communicating information. 	<ol style="list-style-type: none"> 1. Patterns 2. Cause and effect 3. Scale, proportion, and quantity 4. Systems and system models 5. Measurement 6. Math shifts
Transfer Goals	
<ul style="list-style-type: none"> • Understand classroom procedures • Describe technology • Incorporate math processes in measurement • Apply proper measuring practices to 1/16 of an inch. 	
Key Learnings/Big Ideas	
<ul style="list-style-type: none"> • How to follow classroom procedures specific to Tech Ed • How measuring is utilized in real-life situations • How to utilize linear measurement 	
Content and Reading and Writing Standards	
<p>Indicate eligible content standards by highlighting. Include PA Core Reading and Writing for Science, Technical Subjects, Mathematics.</p> <p>3.7.7.B Use appropriate instruments and apparatus to study materials.</p> <ul style="list-style-type: none"> • Select appropriate instruments to measure the size, weight, shape and temperature of living and non-living objects. • Apply knowledge of different measurement systems to measure and record objects' properties. 	
Essential Questions	Vocabulary (Best Practices)
	Utilize concepts & competencies to add to vocabulary

Unit EQ: <ul style="list-style-type: none"> • What is technology? • What are the major areas of technology? • How is measuring implemented? • How is the ruler read and used? • When does a fraction need to be simplified? 	Vocabulary: <ul style="list-style-type: none"> • energy/power/transportation • construction • manufacturing • communication • fraction • US customary system • Mixed number • Improper fraction
Concepts Students will know...	Skills/Competencies (I Can...) Based on LEQs Students will be able to...
<ul style="list-style-type: none"> • Roles of technology • How to measure to 1/16" 	<ul style="list-style-type: none"> • Measure to 1/16" • Follow classroom procedures • Identify the types of technology

Assessment Evidence

Formative Assessment

- Measuring activities

Summative Assessment

- Measuring tests

Best Instructional Practices

- Subject Specific Best Practices (example: Science Processes)
 - Extended Thinking
 - Summarizing
 - Vocabulary in Context
 - Advance Organizers
 - Non-verbal Representation
 - Integration of Webb's Depth (examples)
 - Integration of 21st Century Skills (examples)
 - Reading and writing across disciplines (examples)
- Differentiated options (examples)

21 Century Skills/ STEM		
Learning and Innovation Skills	Information, Media, and Technology Skills	Life and Career Skills
Creativity and Innovation Critical Thinking and Problem Solving Communication and Collaboration	Information Literacy Media Literacy ICT (Information, Communications and Technology) Literacy	Flexibility and Adaptability Initiative and Self -Direction Productivity and Accountability Leadership and Responsibility
Extended Thinking Summarizing Vocabulary in Context Advance Organizers Non-verbal Representation Integration of Webb's Depth (examples) Integration of 21 st Century Skills (examples) Reading and writing across disciplines (examples) Differentiated options (examples)		

Resources

Student	Teacher
<ul style="list-style-type: none"> The Ruler Game http://www.rulergame.net Teachers' websites Allen Middle School—Mr. Griffith http://www.wssd.k12.pa.us/webpages/MGriffith/ New Cumberland Middle School – Andre Faranov http://www.wssd.k12.pa.us/webpages/AFaranov/links.cfm Crossroads Middle School - Mr.Papieredin http://www.wssd.k12.pa.us/webpages/MPapieredin/ 	<ul style="list-style-type: none"> Andre Faranov Matthew Griffith Michael Papieredin

Adapted from Wiggins, Grant and J. Mc Tighe. (1998). *Understanding by Design*, Association for Supervision and Curriculum Development, ISBN # 0-87120-313-8 (ppk)