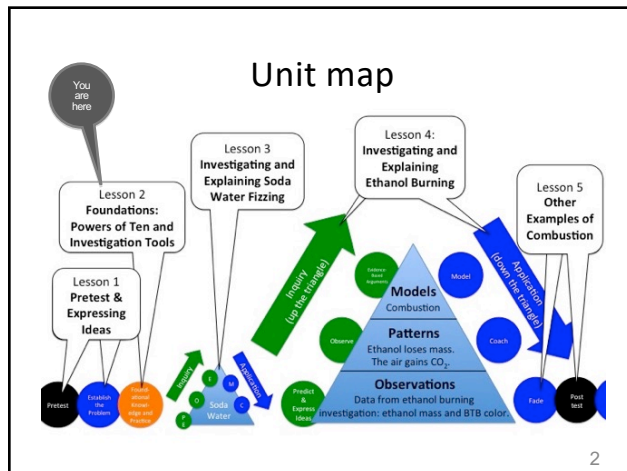


**Carbon TIME** Carbon: Transformations in Matter and Energy  
Environmental Literacy Project  
Michigan State University

# Systems and Scale Unit

## Activity 2.1 Powers of Ten

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### Powers of Ten

Benchmark Scale	Power of Ten	Decimal Style	
Large scale	$10^7$ m	10,000,000 m	kilometer
	$10^6$ m	1,000,000 m	
	$10^5$ m	100,000 m	
	$10^4$ m	10,000 m	
	$10^3$ m	1,000 m	
Macroscopic scale	$10^2$ m	100 m	meter
	$10^1$ m	10 m	
	$10^0$ m	1 m	
	$10^{-1}$ m	0.1 m	
	$10^{-2}$ m	0.01 m	
Microscopic scale	$10^{-3}$ m	0.001 m	millimeter
	$10^{-4}$ m	0.0001 m	
	$10^{-5}$ m	0.00001 m	
	$10^{-6}$ m	0.000001 m	
Atomic-molecular scale	$10^{-6}$ m	0.000001 m	micrometer
	$10^{-9}$ m	0.000000001 m	
Atomic-molecular scale	$10^{-9}$ m	0.000000001 m	nanometer
	$10^{-10}$ m	0.0000000001 m	

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### Powers of Ten

Benchmark Scale	Power of Ten	Decimal Style	
Large scale	$10^7$ m	10,000,000 m	kilometer
	$10^6$ m	1,000,000 m	
	$10^5$ m	100,000 m	
	$10^4$ m	10,000 m	
	$10^3$ m	1,000 m	
Macroscopic scale	$10^2$ m	100 m	meter
	$10^1$ m	10 m	
	$10^0$ m	1 m	
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	$10^{-5}$ m	0.00001 m	
	$10^{-6}$ m	0.000001 m	
Atomic-molecular scale	$10^{-6}$ m	0.000001 m	micrometer
	$10^{-9}$ m	0.000000001 m	
Atomic-molecular scale	$10^{-9}$ m	0.000000001 m	nanometer
	$10^{-10}$ m	0.0000000001 m	

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