

Unit B: Soil and Life - Learning Goals

Name: _____

Period: _____

Instructions: Use the performance expectations sheet to document your current level of understanding (1-4) for each learning goal **after** completing an activity.

Unit B: Soil & Life Learning Goals	Pre-Assessment	Act 1. Why do leaves change color?	Act 2. What was the Dust Bowl?	Act 3. What is Weathering?	ACT 4. Everything Begins & ends with soil	ACT 5. What is Soil?	Act 6. What are the layers of oil?	Act 7. How does soil & soil layers form?	Act 8. What are Soil Nutrients?	Why is soil important?	Post-Assessment
Soil Formation											
1. I can explain how soil is formed.											
Soil Layers and Hazards to Soil											
2. I can explain how the 4 layers of healthy soil are formed & can give examples of hazards to healthy soil.											
Using Technology to Learn											
3. I can complete a soil field study while using an iPad to support my learning.											

Unit B: Soil & Life Performance Expectations	Level 1	Level 2	Level 3	Level 4
<p>Learning Goal #1:</p> <p>I can explain how soil is formed.</p>	<p>I can <i>define</i> the following terms:</p> <ul style="list-style-type: none"> • Sand • silt • nutrients • phosphorus • pH • decomposition • matter cycling • organic • inorganic • chemical weathering • physical weathering • biological weathering <ul style="list-style-type: none"> • Loam • clay • nitrogen • potassium 	<p>I can identify & draw:</p> <ul style="list-style-type: none"> • Sand, Silt & Clay particles <p>I know</p> <ul style="list-style-type: none"> • what each soil type is made of • what each soil type looks like. • that soil is made of both inorganic and organic materials. 	<p>I can identify & draw organic & inorganic materials in a soil sample.</p> <p>I can accurately measure the key nutrients (NPK & pH) in soil samples.</p> <p>I can <i>describe how the inorganic part of soil is made of</i></p> <ul style="list-style-type: none"> • physical weathering • chemical weathering • biological weathering 	<p>I can explain to others how matter cycles in a forest through decomposition.</p>
<p>Learning Goal #2:</p> <p>I can explain how the 4 layers of healthy soil are formed & can give examples of hazards to healthy soil</p>	<p>I can <i>define</i> the following terms:</p> <ul style="list-style-type: none"> • soil horizon/layer <ul style="list-style-type: none"> ○ O horizon/layer ○ A horizon/layer ○ B horizon/layer ○ C horizon/layer • humus • soil organisms (macro/micro) • physical properties • biological properties • chemical properties • erosion <ul style="list-style-type: none"> • overgrazing • pollution <ul style="list-style-type: none"> • soil sealing • dead zones (HC/Challenge) 	<p>I can <i>identify</i> the 4 layers of soil on a diagram.</p> <p>I can <i>tell the:</i></p> <ul style="list-style-type: none"> • physical properties • chemical properties and • biological properties of soil layers are. • 3 key hazards to healthy soil 	<p>I can</p> <ul style="list-style-type: none"> • explain how the 4 layers of soil are formed. • identify a soil layer based on its physical properties. • give examples of how soil hazards occur. 	<p>I can explain to others:</p> <ul style="list-style-type: none"> • the main conditions that caused the Dust Bowl to occur. • 4 ways to avoid dust bowl (major soil erosion) problems
<p>Learning Goal #3:</p> <p>I can complete a soil field study while using an iPad to support my learning.</p>	<p>I can <i>define</i> the following terms:</p> <ul style="list-style-type: none"> • field study • results • <i>error</i> • <i>data</i> • <i>evidence</i> • <i>conclusion</i> <p>Voc cards are not required for previous voc. words (in italics.)</p>	<p>I can locate all my on line resources.</p> <p>I can <i>accurately</i> collect data for a field study.</p> <p>I can <i>identify</i> errors in a field study.</p>	<p>I can</p> <ul style="list-style-type: none"> • use online resources to identify soil concepts, notes, voc. & HO. • correctly analyze data. • I can identify the <u>type & cause</u> of errors made in a field study. • create a logical conclusion with at least 3 examples of evidence. 	<p>I can explain how to</p> <ul style="list-style-type: none"> • use soil online resources & extended resources to others. • correct errors made in another's field study <p>I can <i>provide additional</i> evidence in my conclusion to make it even stronger.</p>

Student Leadership, Participation & Teamwork Self-Assessment

Tell 2 examples of your LPT skills per area to support your score

1 – Below Standard, 2 – Approaching Standard, 3 – Standard, 4 – Above Standard

1. Leadership: Explain w/2 examples: _____

2. Participation: Explain w/2 examples: _____

3. Teamwork: Explain w/2 examples: _____

Student Growth, Learning Progress and Goal Setting. Please complete each section as indicated below.

4. Tell three concepts/learning goals that you have shown growth in. Explain.

- a. _____
- b. _____
- c. _____

5. Tell three concepts/learning goals you still need more growth in. Explain.

- a. _____
- b. _____
- c. _____

Parent Signature _____ Date: _____

Comments: _____

Teacher Review - To be completed by your teacher

1 – Below Standard, 2 – Approaching Standard, 3 – Standard, 4 – Above Standard

Voc	Voc
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1. Activities completed

2. Corrections made in red pen

3. Self-assessment & learning goals completed above.....

4. Parent review completed

FINAL SCORE

Leadership, Participation & Teamwork rating.....

