Project Learning Tree Pre K-8 Environmental Education Activity Guide Grade Level Expectations Correlations (Arranged alphabetically and with page number for each activity)

Adopt a Tree (97)

Part A (Pre K-2)

SC 1 ME.1.A.K.a

SC 3 LO.1.A.1.b; LO.1.D.1.a

Part B (Grades 3-8)

SC 3 LO.1.A.3.a; LO.1.B.3.a;

SC 4 EC.1.D.4.a

This activity has a strong English/Language Arts component. It also has many other ideas for adaptations on page 98, which would address different GLEs. There are also many opportunities to address more GLEs in Strand 4, if guestions asked are more in depth.

Air Plants (120) (Grades 3-6)

SC 1 ME.1.D.3.a; ME.2.C.3.a

SC 3 LO.1.A.6.a; LO.2.B.6.a

The background info in this activity is perfect for middle and high school photosynthesis and cellular respiration and the activity would be a good, quick intro into those subjects for 8th grade GLEs and Biology CLEs (Strand 3).

Air We Breathe (308) (Grades 6-8)

Part A

SC 1 ME.1.C.6.a; ME 1.C.8.a

Part B

SC 1 ME.1.C.6.a; ME.1.C.8.a; ME.1.F.8.a

Part C

SC 1 ME.1.F.8.a; ME.1.G.6.a

SC 3 LO.2.C.8.f

SC 4 EC.1.D.8.a

SC 8 ST.1.C.6-8.a; ST.3.B.6-8.b

Are Vacant Lots Vacant? (200)

SC 4 EC.1.D.4.a; EC.2.A.4.c; EC.3.C.4.d; EC.1.A.6.a; EC.1.B.6.a & b; EC.1.D.6.a & c

K-3 Variation

SC 3 LO.1.A.1.a&b; LO.1.E.1.a; LO.1.A.3.a

Birds and Worms (111)

SC 4 EC.3.C.4.a, b & d; EC.1.B.6.a; EC.3.C.6.a&b

For HS students, asking students to explain carrying capacity for the area, population changes or even adaptations that resulted from variations favored by natural selection could really expand this basic idea. If so, then the following would be addressed: EC.1.A.Bio.b; EC.1.B.Bio.a&b; EC.3.C.Bio.a

Bursting Buds (277)

SC 7 IN.1.B.K-6.a&b; IN.1.E.K-6.a

This activity could be extended to include GLEs for grades K-3 in Strand 3 (LO.1.d.K-3.a). As written, it is purely an observation activity.

By the Rivers of Babylon (411)

SC 4 EC.1.A.6.a; EC.1.B.6.b; EC.1.D.6.a

SC 5 ES.3.A.6.b&c

SC 7 IN.1.C.6-8.a; IN.1.E.6-8.a

It would be easy with more conversation to also address IN.1.D.6-8 a7b, If class discussion asked students to reflect on how reasonable their explanation is and what their evidence is for their reasons.

Can It Be Real? (54)

SC 4 EC.1.A.4.a; EC.3.C.4.a-c; EC.3.C.6.a

SC 7 IN.1.E.4-8.a

Charting Diversity (50)

SC 4 EC.1.A.4.b; EC.3.C.4.d; EC.3.C.6.a & b

Closer You Look, The (263)

SC 3 LO.1.D.K.a; LO.1.E.1.a **SC 7** IN.1.B.K-6.a; IN.1.E.K.a

Could address LO.1.D.3.a, If students are asked to go one step further and ID the functions of roots, stems, flowers and leaves that they see.

Democracy in Action (245)

In the course of research and depending upon which groups to study are selected, the following may be addressed:

SC 8 ST.3.A.5.a & b; ST.3.B.6-8.a

This activity has a strong Social Studies component.

Did You Notice? (414)

Part A (Pre K-8)

SC 3 LO.1.B.2.a

SC 7 IN.1.C.K-2.a

Part B (Grades 3-8)

SC 3 LO.1.B.3.a

SC 4 EC.1.D.4.a

This activity could address SC 4 EC.1.B.6.B, If students are asked to identify factors that affect the number and types of organisms in an ecosystem OR relate all of the vegetation, wildlife and human environment together. Also, SC 4 EC.1.D.6.a, If students are asked to go one step further and *explain* how changes affect organisms within an ecosystem.

This activity has a strong Social Studies component.

Dynamic Duos (113)

SC 4 EC.1.D.8.a

Because this activity is about symbiotic relationships, it really fits better with a high school CLE—SC 4 EC.1.A.Bio.a7b

Earth Manners (378)

SC 4 EC.1.D.4.a

SC 7 IN.1.E.K-4.a

SC 8 ST.3.A.K-2

This activity has a Language Arts component (reading).

Energy Sleuths (167)

Part A (Pre K-3)

SC 1 ME.2.A.3.a&b; ME.2.C.3.a

SC 3 LO.1.A.1.a&b

SC 7 IN.1.B.K-3.a

Part B & C (Grades 4-8)

SC 1 ME.2.C.5.a; ME.2.F.4.a; ME.2.A.8.a;

ME.2.F.7.a-c

SC 5 ES.3.A.5.b; ES.1.C.7.b; ES.3.A.7.a

SC 8 ST.1.C.4-5.a; ST.3.B.6-8.a

SC 5 ES.3.A.7.a is an exact match for non-renewable and renewable resources.

Environmental Exchange Box (92)

SC 7 IN.1.B.K-8.a

This activity has a Social Studies and English/Language Arts component too.

Every Drop Counts (163)

SC 5 ES.3.A.5.b & c, but only if the discussion is led in this direction and if that extension option is done as part of the activity

This activity has a strong math component.

Every Tree for Itself (117)

SC 3 LO.1.A.1.b; LO.1.A.3.a; LO.1.A.6.a

SC 4 EC.4.1.B.6.a&b; EC.4.2.A.3.a

SC 7 IN.1.C.K-8.a

Also, EC.2.A.3.a, If teacher specifically teaches that the sun is the primary source of energy for

food production. LO.1.A.6.a and LO.1.A.8.a will also be addressed, If photosynthesis is specifically taught.

400-Acre Wood (217)

SC 4 EC.1.B.6.a-c; EC.1.D.6.a **SC 7** IN.1.B.7-8.e-f; IN.1.C.7-8.a; IN.1.D.7-8.a; IN.1.E.7-8.a

Also, math is involved in this activity.

The Fallen Log (105)

SC 3 LO.1.E.5.e **SC 4** EC.1.A.4.b; EC.2.A.4.a; EC.1.8.D.a EC.2.A.6.b **SC 5** ES.2.A.4.a

Could easily address or reinforce LO.1.E.6.b

A Few of My Favorite Things (75)

SC 4 EC.1.D.6.a **SC 5** ES.3.A.2.a; ES.3.A.4.b; ES.3.A.7.a

Note the extensions of Swap Shop and Trashion Show as additional classroom activities.

Field, Forest and Stream (203)

SC 4 EC.1.A.4.b; EC.1.A.6.a; EC.1.B.6.b **SC 7** IN.1.B.4-8.a; IN.1.B.4.b-e; IN.1.B.5-8.c-e; IN.1.E.4-8.a

This activity fits very well with the Missouri Dept. of Conservation's Discover Nature Schools series—Nature Unleashed (grades 3-5) and Conserving Missouri's Aquatic Ecosystems (grades 6-8).

Forest Consequences (138)

SC 4 EC.1.B.6.a-c; EC.1.D.6.a & c

NOTE: This activity is more about the decision-making process, but could address the above GLEs, as well.

This land management activity can easily be used with high school classes and could yield even richer discussions than with middle school students, especially if the focus is on the political, social and cultural issues surrounding this scenario.

Forest for the Trees (291)

SC 4 EC.1.B.6.c; EC.1.D.6.a-b

This activity includes an easy, one-page sheet on Forest Silviculture Systems for management and could be useful for other activities.

A Forest of Many Uses (135)

Part A (Grades 1-4) **SC 4** EC.1.A.1.a

Part B (Grades 5-8) **SC 4** EC.1.A.6.a; EC.1.B.6.a; EC.1.D.6.a

The Forest of S.T. Shrew (40)

SC 4 EC.3.C.4.b (only if brought up in discussion about the story)

This activity includes listening to or reading a fictional story and drawing/art project.

Germinating Giants (279)

SC 4 EC.3.C.4.a; EC.3.C.6.a

Get in Touch with Trees (20)

SC 3 LO.1.E.1.a; LO.1.E.5.e **SC 7** IN.1.B.K-6.a; IN.1.C.K-6.a

In Part B, there is a link to use of simile, metaphor and analogy for ELA.

The Global Climate (363)

SC 1 ME.1.F.8.a; ME.2.C.7.a

SC 5 ES.1.C.7.a & b

SC 7 IN.1.B.6-8.e & f; IN.1.C.6-8.a-c; IN.1.D.6-

8.a & b; IN.1.E.6-8.a

SC 8 ST.2.B.6-8.b

Habitat Pen Pals (37)

SC 4 EC.1.A.4.b

This activity leads right into EC.3.4.b, if you want to expand on that idea. The same is true for EC.3.C.6.a & b.

Have Seeds, Will Travel (185)

SC 3 LO.1.D.1.a; LO.1.D.3.a

SC 4 EC.1.A.4.a; EC.3.C.4.a

How Big is Your Tree? (284)

Grades 4-8

SC 7 IN.1.B.4.b-e; IN.1.B.5-8.d-f; IN.1.E.4-8.a

Variation (Grades PreK-3)

SC 7 IN.1.B.K-2.c & d; IN.1.B.3.b-e

This activity has a strong math component.

How Plants Grow (179)

SC 4 EC.A.6.a

SC 7 IN.1.A.4a-5.c; IN.1.B.4.a-d; IN.1.B.5.a-e; IN.1.C.4-5.a; IN.1.D.4-5.a; IN.1.B.6-8.a-f; IN.1.C.6-8.a&d; IN.1.D.6-8.a

IN.1.A.6-8.a would also lead into IN.1.6-8.b-d, but would have to be deliberately taught.

Variation (Grades PreK-3)

SC 3 LO.A.1.a&b; LO.1.A.3.a

SC 7 IN.1.A.K-3.b; IN.1.B.K-3.a-d; IN.1.C.K-3.a;

IN.1.D.K-3

Could also lead into IN.1.A.1.c, if they are asked to predict the outcome.

I'd Like to Visit a Place Where... (236)

Part A (Grades PreK-3)

Part B (Grades 4-8)

SC 4 EC.1.D.4 & 6.a

Part C: (Grades 4-8)

SC 4 EC.1.D.4 & 6.a

SC 8 ST.3.A.4-5.a & b

Improve Your Place (418)

SC 7 IN.1.B.5-8.a & b; IN.1.E.5-8.a

In the Driver's Seat (370)

This activity relates fossil fuel consumption with family cars and future cars for students. It also uses some basic math.

In the Good Old Days (396)

This activity has a strong English/Language arts component, comparing author's works with attitudes expressed towards forests.

Invasive Species (59)

SC 4 EC.1.B.6.a & b; EC.1.D.6.a & c; EC.3.C.6.a

Life on the Edge (382)

SC 4 EC.1.B.6.a & b; EC.3.C.4.d

Living with Fire (350)

This activity introduces to the fire triangle and what is needed for fire to burn. A link to ME.1.A.8.a can be made to link fire and oxygen together.

A Look at Aluminum (228)

SC 1 ME.1.A.8.a & b; ME.1.F.8.a

A Look at Lifestyles (401)

Part A

Part B & C

SC 4 1.D.6.a & c

This activity has a strong Social Studies component.

Looking at Leaves (273)

SC 3 LO.1.D.1.a

This activity leads directly to LO.1.E.5.e, the use of dichotomous keys at 5th grade level.

Loving It too Much (147)

SC 4 1.D.6.a & c

Make Your Own Paper (224)

SC 5 ES.3.A.5.b **SC 8** ST.1.A.3.a

This activity is a great art project activity.

Name That Tree (288)

This is a good, basic, leaf identification activity to identify trees, where students make comparisons between leaves and other parts of the tree. It is a good lead-in for **SC 3** LO.1.E.5.e. This GLE is about using dichotomous keys.

Native Ways (389)

This activity is a strong Social Studies activity, as it compares two speeches by Chief Seattle and focuses on Native American tribes in North America.

Nature's Recyclers (108)

SC 7 IN.1.A.K-3.a; IN.1.A.4-6.c; IN.1.B.K-6.a; IN.1.C.K-6.a; IN.1.C.K-2.c; IN.1.C.3-6.d; IN.1.D.K-6.a

The Variation focuses on earthworms and composting, so ES.2.A.4.a applies too.

Nothing Succeeds Like Succession (345)

Part A (Grades 3-6) **SC 4** EC.1.A.4.a

Part B (Grades 4-8)

SC 4 EC.1.D.6.a & b

Part C (Grades 4-8)

SC 4 EC.1.B.6.a & c

For Part A, EC.1.B.6.c asks students to make a prediction—this would be very easy to add into Part A.

On The Move (232)

Part A (Grades 4-8)

SC 8 ST.1.C.4-5.a

Our Changing World (375)

Part A

SC 4 EC.1.A.6.a

SC 5 ES.3.A.6.b

Part B

SC 4 EC.1.D.6.a

Paper Civilizations (407)

This activity has a strong Social Studies component, with a Fine Arts activity.

Pass the Plants, Please (77)

Part B (Grades 3-8)

SC 7 IN.1.B.3-8.a; IN.1.E.3-8.a

This activity has a strong Health component.

A Peek at Packaging (360)

This activity is aimed at grades 5-8, but ES.3.A.4.b fits better, so good for 4th grade.

People of the Forest (82)

SC 4 EC.1.B.6.a & c; EC.1.D.6.a

People, Places, Things (318)

This activity has a strong Social Studies component and is a good way for the younger grades to learn about their town or place.

Peppermint Beetle (23)

SC 3 LO.1.D.1.d

SC 4 EC.3.C.4.b; EC.3.C.6.a

SC 7 IN.1.B.K-6.a

If students were asked to make predictions, then this would lead right into EC.3.C.6.b.

Picture This! (34)

Part A (Pre K-1)

SC 3 LO.1.D.K-1.a; LO.1.D.a.b

Part B (Grades 1-5)

SC 3 LO.1.E.5.d

For Part A, this activity assumes that all K-1 students know the difference between plants and animals (LO.1.E.1.a)

For Part B, this activity could easily lead to Strand 4: EC.3.C.4.a & b, IF students are asked to *describe* and EC.3.C.4.d, IF students were asked to *predict* what animals/plants might live in a certain area. It would also lead to LO.1.E.5.e about using dichotomous keys in 5th grade.

Planet Diversity (45)

SC 4 EC.1.A.4.b; EC.3.C.4.d; EC.1.B.6.b **SC 7** IN.1.B.4-6.a; IN.1.C.4-6.a; IN.1.E.4-6.a

This activity about biodiversity is leading to the high school concepts of adaptation for survival. This activity is close to addressing EC.1.A.4.a. It also makes the assumption that students can do EC.3.C.4.a&b, before they can do the middle GLE listed above. Both EC.3.C.6.a & b could be addressed, IF students are asked to relate to adaptations and *predict* how adaptations are needed for survival advantage.

Planning the Ideal Community (239)

Variation: (Grades K-3)

SC 3 LO.1.A.1.a

This activity has a strong Social Studies component that focuses on how people get food, water, energy and the resources that they need to survive.

Plant a Tree (132)

SC 3 LO.1.A.1.b; LO.1.A.3.a

SC 4 EC.1.D.4.a

Poet-Tree (31)

SC 7 IN.1.B.3-8.a

Students write poetry in this activity to link English/Language Arts with nature and observation.

Pollution Search (153)

Part A (Grades 2-6)

SC 4 EC.1.D.4.a; EC.1.D.6.a & c

SC 7 IN.1.B.2-6.a; IN.1.D.2-6.a

Part B (Grades 2-6)

SC 4 1.D.6.c

Power of Print (253)

This activity has a strong English/Language Arts component with analysis of author intent and then writing for facts and writing for opinion.

Publicize It! (256)

This activity has a strong English/Language Arts component, considering media application.

Rain Reasons (123)

Part A

SC 4 EC.1.A.6.a

SC 7 IN.1.A.6-8.b & c; IN.1.B.6-8.a; IN.1.C.6-8.a; IN.1.D.6-8.a & b; IN.1.E.6-8.a

Part B

SC 4 EC.1.B.6.b; EC.3.C.6.a & b

Part C

SC 4 EC.1.A.6.a; EC.1.B.6.b

Reduce, Reuse, Recycle (159)

SC 4 EC.1.D.6.a & c

SC 7 IN.1.B.5-8.a; IN.1.C.5-8.a; 1.D.5-8.a

Renewable or Not (69)

Part A

SC 7 IN.1.E.4-8.a

SC 8 ST.1.C.4.a

Part B

SC 8 ST.1.C.4.a; ST.3.B.6-8.a

Resource Go-Round (355)

SC 5 ES.3.A.7.a

Schoolyard Safari (197)

SC 3 LO.1.A.1 & 3.a

SC 7 IN.1.A.K-5.a; IN.1.E.K-5.a

The Shape of Things (17)

Part A (Pre K-K)

SC 1 ME.1.A.K.a

Part B (Pre K-3)

SC 1 ME.1.A.K.a

SC 7 IN.1.B.K-3.a; IN.1.E.K-3.a

Signs of Fall (337)

Part A (Grades K-5)

SC 4 1.A.K.a & b

SC 7 1.B.K-5.a; 1.C.K-5.a; 1.D.K.a

Part B is an introduction to capillary action and the pigments found in leaves, along with a demo of **chromatography**—a basic high school biology lab for photosynthesis.

Soil Stories (297)

Part A

SC 3 LO.1.A. 1 & 3.b

SC 5 ES.1.A.2.a; ES.1.A.4.a

Part B

SC 5 ES.1.A.6.a

SC 7 IN.1.B.5-8.a & d; IN.1.C.5-8.a; IN.1.D.5-8.a

& b; IN.1.E.5-8.a

Sounds Around (26)

Part A (Pre K-K)

SC 1 ME.2.A.K.a & b

Part B (Grades 1-6)

SC 1 ME.2.A.2.c

SC 4 EC.3.C.4.b;

Part C (Grades 6-8)

SC 1 ME.2.A.6.i & j

SC 7 IN.1.A.6-8.b & c; IN.1.B.6-8.a, c-f; IN.1.C.6-

8.a; IN.1.E.6-8.a

Part D (Grades 3-8)

This part of the activity has a strong

English/Language Arts component.

In Part B, this activity leads to EC.3.C.6.a & b (survival in species) and could be addressed

with further discussion.

Sunlight and Shades of Green (182)

SC 3 LO.1.A.3.a; LO.1.A.8.a; LO.2.B.6.a;

Note the Enrichment option for Grades 6-8 that test for the presence of starches in leaves. Students could be asked to do the following, after the imaginary field trip: LO.1.C.3.a Going one step further for 8th grade, LO.2.B.8.a

& c; LO.2.C.8.e could be addressed.

Tale of the Sun (86)

This activity has a strong English/Language Arts component, as students read a Native American story about the origin of the sun.

Then and Now (174)

SC 4 EC.1.D.4.a; EC.1.B.6.a & b; EC.1.D.6.a

This activity has a strong Social Studies component.

There Ought to Be a Law (249)

This activity is a very strong Social Studies activity, as students look at how community laws can be changed.

Three Cheers for Trees (130)

SC 4 EC.1.A.4.a

This activity has a Fine Arts component (drawing).

Tipi Talk (320)

SC 4 EC.1.A.4.a

This activity is mostly English/Language Arts and allows students to read non-fiction sources to learn more about Native American Plains Indians and make *inferences* about their lifestyle.

To Be a Tree (265)

SC 3 LO.1.A.1.b; LO.1.D.1.c; LO.1.A.3.a; LO.1.D.3.a

LO.2.C.3.a will correlate too, if water is also mentioned

This activity has a Spanish language component for vocabulary.

Tree Cookies (327)

SC 3 LO.1.A.3.a; LO.2.C.3.a

LO.3.D.3.a can also apply, IF seedlings are discussed. In addition, LO.1.E.5.e could also be addressed, if trees were identified, using a dichotomous key.

This activity has a nice Social Studies link, linking history with the life of a tree.

Tree Factory (269)

SC 3 LO.1.A.3.a; LO.1.D.3.a; LO.2.C.3.a

LO.3.D.3.a can also apply, IF seedlings are discussed.

Variation:

SC 3 LO.1.A.1.a & b; LO.1.D.1.c

Trees as Habitats (102)

Part A (Grades Pre-K-2)

SC 3 LO.1.A.1.a

SC 7 IN.1.A.1.a

Part B and Variation (Grades 3-8)

SC 4 EC.1.A.4.a

SC 7 IN.1.B.3-8.a; IN.1.C.3-8.a; IN.1.E.3-8.c

Trees for Many Reasons (387)

Part A (Grades 2-8)

Variation: (Grades 4-8)

SC 4 EC.1.D.4.a (if the link to Missouri is made) EC.1.D.6.a & c

Part B (Grades 6-8)

SC 4 EC.1.D.6.a; EC.1.D.6.c

Note: EC.1.D.6.c is addressed, but it would be good to focus more on the possible solutions and things students can do to improve these kinds of situations, following the questions in the activity.

Trees in Trouble (332)

Part A (Grades 1-8)

SC 7 IN.1.A.4-8.a; IN.1.B.1-8.a

Part B (Grades 4-8)

SC 4 EC.1.B.6.a & b

SC 7 IN.1.A.4-5.c; IN.1.B.4-8.a; IN.1.B.4.c & d;

IN.1.B.5-8.d & e; IN.1.C.4-8.a

This activity has a health component. In addition, EC.1.D.8.a could be used, IF the discussion also went to fungal and viral/bacterial diseases that can affect trees.

Tree Lifecycle (341)

SC 3 LO.1.B.3.a; LO 3.D.3.a (but might need to be specific here about seedlings, saplings, etc.)

Variation: (Grades PreK-2) Students act out the lifecycle of a tree

Tropical Treehouse (207)

Part A (Grades 3-6) **SC 4** EC.1.A.4.b

Part B (Grades 4-8) **SC 4** EC.3.C.4.c

This part of the activity also has a math component.

Part C (Grades 6-8)
This part of the activity has a Social Studies component.

Viewpoints on the Line (89)

SC 5 ES.3.A.7.a **SC 8** ST.1.C.6-8.a

This activity has a strong Social Studies component and is a good way to begin a discussion.

Waste Watchers (314)

This activity has a strong math component as students log their electricity usage for a week.

Watch on Wetlands (303)

Part A

SC 7 IN.1.B.6-8.a,c & e; IN.1.C.6-8.a; IN.1.D.6-8.a

Part B

SC 7 IN.1.D.6-8.a

Part C

This part has a strong Social Studies component.

Water Wonders (188)

Part A

SC 5 ES.2.E.5.a & b; ES.2.E.7.a

Part B

This part of the activity makes links between the water cycle and its effect on plants and erosion, although it doesn't directly correlate with specific GLEs.

We All Need Trees (65)

Part A (Pre K-1) **SC 4** EC.1.A.1.a

Part B (Grades 2-6)

This part of the activity has students determine if various products come from trees or not.

Web of Life (194)

SC 3 LO.1.A.6.a

SC 4 EC.1.A.4.b; EC.1.B.6.c

This activity was very close in addressing additional GLEs, if the teacher brings up these items and uses specific vocabulary.

SC 3 LO.2.B.6.a; LO.2.A.4.a & c

SC 4 EC.1.A.6.a; EC.1.B.6.a; EC.1.D.6.a-c; EC.2.A.6.a

We Can Work it Out (241)

This activity demonstrates 3 decision-making processes and allows students to practice their decision-making skills by considering a community situation about land use. This one has a strong Social Studies component.

Who Works in This Forest? (144)

SC 4 EC.1.A.4.a