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BSA



PLT

CORRELATION OF BSA MERIT BADGES TO PROJECT LEARNING TREE MATERIALS

THE COLLABORATION

The Boy Scouts of America entered into a Memorandum of Mutual Support with the Sustainable Forestry Initiative (SFI) in 2016. Part of the agreement entails the correlation of BSA program materials to SFI's award-winning environmental education program, Project Learning Tree (PLT).

PLT is designed for teachers and other educators, parents, and community leaders working with youth from preschool through grade 12. It offers lesson plans and activities for all ages that can be easily incorporated into existing curriculum or used in informal settings.

The correlation displayed on the following pages focuses on the six BSA merit badges listed below. This correlation is designed to assist merit badge counselors and Scoutmasters in helping Scouts meet the badge requirements.

- Environmental Science
- Forestry
- Nature
- Pulp and Paper
- Soil and Water Conservation
- Sustainability



The PLT activities identified here provide fun and inspiring approaches for completing various merit badge requirements. Please note that PLT will not satisfy all the requirements for any particular badge, but it can help Scouts meet a substantial proportion of the required content.

ACCESSING THE PROJECT LEARNING TREE CURRICULUM

Unless indicated otherwise, the correlation refers to activities in the *PLT PreK-8 Environmental Education Guide*. Other PLT guides referenced in the correlation are shown in Table 1. To receive most materials, you must participate in an [online](#) or [in-person](#) professional development workshop. [Contact your state's coordinator](#) to find out about workshops in your area. To learn more about these and other PLT educational materials and offerings, visit the [PLT website](#).



PLT GUIDES REFERENCED IN BOY SCOUT MERIT BADGE CORRELATION

ABBREVIATION	PLT ACTIVITY GUIDE	HOW TO OBTAIN
(none)	PreK-8 Environmental Education Guide	Participate in an online course or an in-person workshop
FoF	Exploring Environmental Issues: Focus on Forests	Participate in an in-person workshop
FOTW	Global Connections: Forests of the World	Participate in an in-person workshop
SFCC	Southeastern Forests and Climate Change	Download for free
i-Tree	Teaching with i-Tree	Download for free
GS	GreenSchools Investigations	Download for free or purchase a complete set
E&S	Energy & Society Activity Guide	Participate in an in-person workshop
PWL	Exploring Environmental Issues: Places We Live	Participate in an in-person workshop
MSW	Exploring Environmental Issues: Municipal Solid Waste	Participate in an in-person workshop
BD	Exploring Environmental Activities: Biodiversity	Participate in an in-person workshop
BT	Exploring Environmental Activities: Focus on Risk Biotechnology Supplement	Participate in an in-person workshop

Note that activities marked with an asterisk () support the badge requirement but may require some modification.



ENVIRONMENTAL SCIENCE



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1	Make a timeline of the history of environmental science	51: Make Your Own Paper 91: In the Good Old Days 1: Stepping Through Climate Science (SFCC)	Activity Activity Activity
2	Define environmental science terms	Glossary	
3.A (1)	Conduct experiment on how living things respond to environmental change	29: Rain Reasons 42: Sunlight and Shades of Green 88: Life on the Edge	Activity Activity Variation
3.A (2)	Conduct an experiment on greenhouse effect	84: The Global Climate	Enrichment
3.A (3)	Discuss what an ecosystem is	45: Web of Life	Activity
3.B (1)	Perform experiment to test for particulate air pollution	72: Air We Breathe	Part A
3.B (2)	Record car trips and fuel consumption	85: In the Driver's Seat	Part A
3.C (3)	Describe effects of waterborne pollution	36: Pollution Search* 38: Every Drop Counts	Part A Enrichment
3.D (1)	Conduct an experiment to illustrate soil erosion by water	44: Water Wonders	Part B
3.D (2)	Perform an experiment to determine the effect of an oil spill on land	36: Pollution Search	Activity and Enrichment
3.D (3)	Photograph an area affected by erosion	44: Water Wonders	Part B
3.E (1)	Research an endangered species in state	88: Life on the Edge	Part B
3.E (2)	Research a recovered endangered or threatened species	88: Life on the Edge 3: Pesticides, Potatoes, and Biodiversity (BD)	Part B Activity
3.E (3)	Explore projects to improve habitat of threatened or endangered species	88: Life on the Edge	Part B
3.F (1)	Determine ways family can help reduce pollution	36: Pollution Search Waste & Recycling Investigation (GS)	Part A and Enrichment
3.F (2)	Determine ways to conserve resources or use resources more efficiently	37: Reduce, Reuse, Recycle 42: A Look at Aluminum 83: A Peek at Packaging	Parts A and B Parts A and B Activity
3.F (3)	Experiment on packaging materials to find out which are biodegradable	14: Renewable or Not?	Part A

*Activity supports the badge requirement but may require some modification.

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BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
4.A	Analyze species found in study area and determine level of biodiversity	9: Planet Diversity 48: Field, Forest and Stream 71: Watch on Wetlands 1: Monitoring Forest Health (FoF)	Activity Activity Part A Part A
4.B	Observe study area over time, reporting on observations	48: Field, Forest and Stream 1: Monitoring Forest Health (FoF) 71: Watch on Wetlands 97: Adopt A Tree	Activity Part A Part A Activity
6	Find out about career opportunities in environmental science	34: Who Works in this Forest?	Enrichment





FORESTRY



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1	Create field notebook of tree species	68: Name that Tree 64: Looking at Leaves 1: Monitoring Forest Health (FoF) 1: Tree Benefits and Identification (i-Tree)	Parts A and B Activity Activity* Activity
2.B	Examine tree growth ring patterns	27: Every Tree for Itself 76: Tree Cookies	Steps 1-2 Parts A and B
2.C	Examine damage on trees	77: Trees in Trouble	Part A
3.A (1)	Describe contributions forests make to economy	13: We All Need Trees* 82: Resource-Go-Round 83: A Peek at Packaging World Forest Tour (FOTW) 5: Understanding the Effects of Forest Uses (FOTW) 7: Exploring the World Marketplace (FOTW) 2: Tree Value (i-Tree)	Part B Part B Activity Activity Part A and Part B Activity
3.A (2)	Describe contributions forests make to social well-being	32: A Forest of Many Uses 54: I'd Like to Visit a Place Where... World Forest Tour (FOTW)	Part B, Steps 1-3 Part B or C
3.A (3)	Describe contributions forests make to soil protection	44: Water Wonders 48: Field, Forest, and Stream 70: Soil Stories	Part B Steps 3-4 Part B*
3.A (4)	Describe contributions forests make to clean water	44: Water Wonders 6: Forest to Faucet (FoF) i-Tree Tools	Part B Activity Hydro (Desktop App)
3.A (5)	Describe contributions forests make to clean air	28: Air Plants 7: Carbon on the Move (SFCC)	Activity* Activity
3.A (6)	Describe contributions forests make to wildlife habitat	22: Trees as Habitats 23: The Fallen Log 45: Web of Life 48: Field, Forest, and Stream 50: 400-Acre Wood 2: Protected Areas: Issues and Analysis (BD)	Part B Activity Steps 1-3 Steps 3-4 Activity Activity
3.A (7)	Describe contributions forests make to fisheries habitat	71: Watch on Wetlands	Part A*
3.A (8)	Describe contributions forests make to threatened and endangered species	88: Life on the Edge	Part B
4.A	Describe multiple use management	32: Forest of Many Uses 50: 400-Acre Wood 4: Tough Choices (FoF)	Part B Activity Activity

*Activity supports the badge requirement but may require some modification.

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FORESTRY



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
4.B	Describe sustainable forest management	35: Loving it Too Much 6: Seeking Sustainability: A Global Response (FOTW)	Activity Activity
4.C	Describe even-aged and uneven-aged management	69: Forest for the Trees	Activity and Variation
4.D	Describe intermediate cuttings	69: Forest for the Trees	Activity and Variation
4.E	Describe role of prescribed burning	5: The Nature of Fire (FoF) 81: Living with Fire	Parts A and B Background
5.A	Write a report about public or private forest	3: Who Owns America's Forest FoF)	Part B
5.B	Write a report about a wood-using operation	51: Make Your Own Paper	Enrichment
5.C	Take part in forest-fire prevention campaign	5: The Nature of Fire (FoF) 81: Living with Fire	Parts C and D Activity
6	Inventory hazard trees in local area	77: Trees in Trouble	Part A and Enrichment
7	Write about forest consequences of different elements	12: Invasive Species 33: Forest Consequences 81: Living with Fire 7: Forest Invaders (FoF) 5: The Nature of Fire (FoF)	Activity Activity Activity Activity Parts A and B
8	Write about forester or forester career	34: Who Works in this Forest? 3: Land Manager Role Play (i-Tree)	Enrichment Activity



NATURE



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1	Tell how plants are important to animals and name a protected plant	8: The Forest of S.T. Shrew 22: Trees as Habitats 26: Dynamic Duos 45: Web of Life 48: Field, Forest, and Stream 71: Watch on Wetlands 79: Tree Lifecycle 88: Life on the Edge	Activity Part B (or Variation) Activity Activity Activity Activity Activity Parts A and B
2	Tell how animals are important to plants and name a protected animal	26: Dynamic Duos 45: Web of Life 48: Field, Forest, and Stream 71: Watch on Wetlands 79: Tree Lifecycle 88: Life on the Edge 2: Story of Succession (FoF)	Activity Activity Activity Activity Activity Parts A and B Parts A and B
3	Explain the term “food chain” and give examples	16: Pass the Plants, Please 23: The Fallen Log 24: Nature’s Recyclers 45: Web of Life 49: Tropical Treehouse 71: Watch on Wetlands	Activity Activity Activity Activity Part D Part A
4.G (1)	Identify species of wild plants	68: Name That Tree	Activity
4.G (2)	Collect and label seeds or leaves of plants	43: Have Seeds, Will Travel 64: Looking at Leaves 68: Name That Tree	Activity Activity Activity
4.H (1)	Collect and identify soils found in different layers of a soil profile	70: Soil Stories	Part A



PULP AND PAPER



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1	Tell history of papermaking; describe role of paper in our society	13: We All Need Trees 93: Paper Civilizations	Part B Activity
2.A	Describe ways pulp and paper industry plants, grows, and harvests trees	27: Every Tree for Itself 31: Plant a Tree 69: Forest for the Trees 79: Tree Lifecycle*	Activity Activity Activity and Simulation Activity
2.B	Explain how the industry manages forests so supply keeps pace with demand	27: Every Tree for Itself 32: A Forest of Many Uses 50: 400-Acre Wood 69: Forest for the Trees	Activity (or Variation) Part B Activity Activity and Simulation
2.C	Tell how the industry incorporates sustainable forest management (SFM)	50: 400-Acre Wood 69: Forest for the Trees 6: Seeking Sustainability: A Global Response (FOTW)	Activity Activity and Simulation Activity and Enrichment
4	Describe how paper is made, recycled; make a sheet of paper	37: Reduce, Reuse, Recycle 51: Make Your Own Paper	Part B and Enrichment Activity
6	List and share examples of paper/pulp products	13: We All Need Trees 15: A Few of My Favorite Things 82: Resource-Go-Round 8: Consumer Choices (FOTW)	Activity Activity Activity Activity
7.D	Visit a recycled paper collection or sorting facility	37: Reduce, Reuse, Recycle	Part B and Enrichment
8	Find out about careers in the papermaking industry	34: Who Works in this Forest?	Enrichment

*Activity supports the badge requirement but may require some modification.



SOIL AND WATER



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1.A	Tell what soil is and how it is formed	24: Nature's Recyclers 70: Soil Stories	Activity Part A
1.B	Describe three kinds of soil and how they differ	70: Soil Stories 1: Monitoring Forest Health (FoF)	Part A Activity (particularly Forest Health Indicator: Soil Quality)
4.A	Explain what a watershed is	Water Investigation (GS) 6: Forest to Faucet (FoF)	Part II Activity
4.E	Explain what an aquifer is and why it is important	8: Regional Community Issues: The Ogallala Aquifer (PWL)	Activity
5.A	Make a drawing showing the hydrologic cycle	44: Water Wonders	Part A
5.B	Demonstrate actions of water in relation to soil	70: Soil Stories 6: Forest to Faucet (FoF)	Part B Activity
5.C	Explain how removing vegetation affects runoff	44: Water Wonders	Part B
7.B	Plant trees, bushes, or vines	31: Plant a Tree	Activity
7.E	Describe actions that could correct local erosion, sedimentation, or pollution problems	96: Improve Your Place School Site Investigation (GS)	Activity Part II



SUSTAINABILITY



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
1	Define sustainability	14: Renewable or Not 5: Understanding the Effects of Forest Uses (FOTW) 6: Seeking Sustainability: A Global Response (FOTW)	Activity Steps 4 and 5 Activity
2. Water – A	Plan to reduce water usage	38: Every Drop Counts Water Investigation (GS)	Parts A and B
2. Water – B	Diagram where water comes from	38: Every Drop Counts 44: Water Wonders 6: Forest to Faucet (FoF) Water Investigation (GS)	Enrichment Part A Part A
2. Community – A	Design sustainable community	54: On the Move 55: Planning the Ideal Community 96: Improve Your Place 4: What Powers the Move? (E&S) 6: A Vision for the Future (PWL)	Part B Part B Activity Part B Activity
2. Energy – A	Compare energy sources	39: Energy Sleuths 2: May the Source Be with You (E&S)	Part B Activity
2. Energy – B	Plan to reduce energy consumption	73: Waste Watchers Energy Investigation (GS)	Activity
2. Energy – C	Examine fuel and transportation usage	39: Energy Sleuths 53: On the Move 84: The Global Climate 85: In the Driver's Seat 5: In the Driver's Seat (E&S)	Part C Part A Part C Part A Parts A and B
2. Stuff – A	Characterize family purchases as needs or wants	92: A Look at Lifestyles	Part A
2. Stuff – B	Discuss effects of too much stuff	1: Introduction to Municipal Solid Waste (MSW) 2: Source Reduction (MSW) Waste & Recycling Investigation (GS)	Activity Parts A and C

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SUSTAINABILITY



BSA BADGE REQUIREMENT		PLT ACTIVITY	
NUMBER	DESCRIPTION	NUMBER AND TITLE	PART(S)
3.A	Explain how Earth's systems support life and interact with one another	8: The Forest of S.T. Shrew 22: Trees as Habitats 23: The Fallen Log 28: Air Plants* 42: Sunlight and Shades of Green 44: Water Wonders 45: Web of Life 47: Are Vacant Lots Vacant? 48: Field, Forest, and Stream 49: Tropical Treehouse 70: Soil Stories 71: Watch on Wetlands 84: The Global Climate 86: Our Changing World 2: Story of Succession (FoF) 5: The Nature of Fire (FoF) 8: Climate Change and Forests (FoF) 3: Mapping the World's Forests (FOTW)	Activity, Enrichment Part B (or Variation) Activity Activity Activity Part A Activity Activity Activity Part B Part A Part A Part A Parts A and B Parts A and B Parts A and B Parts A and B Activity
3.B	Tell how raw materials and products affect sustainability	14: Renewable or Not? 49: Tropical Tree House 51: Make Your Own Paper 52: A Look at Aluminum 69: Forest for the Trees 82: Resource-Go-Round 83: A Peek at Packaging 5: Understanding the Effects of Forest Uses (FOTW) 7: Exploring the World Marketplace (FOTW) 8: Consumer Choices (FOTW)	Activity Chart: Tropical Forest Products Activity (particularly Step 9) Part A Activity Parts A and B Activity Activity Parts A and B Activity
4.A	Discuss with family about plastic waste	37: Reduce, Reuse, Recycle 83: A Peek at Packaging	Parts A and B Activity
4.D	Discuss with family about species decline	45: Web of Life 71: Watch on Wetlands 88: Life on the Edge 2: Protected Areas: Issues and Analysis (BD)	Activity Parts B and C Activity Activity
4.F	Discuss with family about climate change	84: The Global Climate 86: Our Changing World 8: Climate Change and Forests (FoF) 1: Stepping through Climate Science (SFCC) 2: Clearing the Air (SFCC) 3: Atlas of Change (SFCC)	Parts A and C Parts A and B Parts A and B Activity Activity Activity

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