Summary: The cost calculator chart below is intended to be used with a companion document that describes outdoor classroc infrastructure costs for a wide variety of outdoor infrastructure options.

Directions: 1) Please begin by reading the document entitled, "Outdoor Infrastructure Planning Strategies for Taking Learning 0 make a site plan for your outdoor learning needs, including the number and placement of desired outdoor classrooms. Make a existing infrastructure, and what will be needed for new spaces. 2) Use the cost calculator below to select the types the option The infrastructure and supply options listed below are related to: seating, shade and rain shelters, health and hygiene, teachin improvements that will enhance the outdoor learning experience. There is also an option for mobile outdoor classroom gear, f use variable locations on the school grounds.)

Assumptions: 1) The following cost estimates are based on an assumption that most K-12 schools will divide their classes into purpose of this estimate, we are assuming those "1/2 class" groups each include between 12-16 students. To calculate cost per below.

2) The "Unit Cost" listed for each item (in Column F) reflects the retail prices of items sourced from the corresponding link, lister estimate for your school, replace these initial estimates in the "Unit Cost" column with the actual cost of items you select. Unit installation unless noted. Lower prices might be available for bulk purchases from some manufacturers. The links are for refere these products.

Version: 6/26/2020 -- Please note: This document is still in development. Visit our website again for an updated, expanded ver http://www.greenschoolyards.org/covid-learn-outside

Item Description	Unit Type	Estimated Price Range Per Unit
Portable Seating for Students and/or Teachers		
Use existing indoor desks/chairs - move outside (for students and teachers)	per person	\$0
Outdoor seat cushion - stadium style	per student	\$6 - \$40
Outdoor seat cushion - w/backrest	per student	\$16 - \$50

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Folding chair - camping style, for younger students	per student	\$15 - \$40
Folding chair - camping style with sunshade, for teachers and/or older students	per person	\$45 - \$220
Rustic Seating - Natural materials, assembled w/community participation		
Log Rounds - rustic, from an arborist or park department	per student	\$0 - varies
Large Tree Trunks (8') - professionally finished as seating, roughly \$100/linear ft	per 2 students	\$800
Straw bales (organic or pesticide free)	per student	\$20
Commercially Produced Benches and Picnic Tables		
Picnic Table (6' or 8')	per 2 students	\$200 - \$1,500
Park-Style Bench (8')	per 2 students	\$250 - \$1,500
Bench to Table (5')	per student	\$250 - \$450

Item Description	Unit Type	Estimated Price Range Per Unit
Event Style Tents (30' x 30' would be ideal, but is hard to find)		
20' x 20' steel party tent (temporary structure)	per class	\$320
20' x 20' commercial high peak frame tent (\$2,900) + sidewalls (\$800)	per class	\$2,900 - \$3,700
20' x 30' commercial frame tent (\$3,300) + sidewalls (\$800)	per class	\$3,300 - \$4,100
20' x 40' commercial frame tent (\$4,500) + sidewalls (\$800)	per class	\$4,500 - \$5,300
Pergolas, metal or wood - standardized commercial products, or custom		
11' x 16' - Aluminum pergola with retractable cloth canopy	per 1/2 class	\$1,900
12' x 16' - Solid wood pergola with retractable cloth canopy	per 1/2 class	\$4,800
Carports		

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9' x 15' - Lightweight shade canopy, metal frame, polyethylene top	per 1/2 class	\$238
10' x 27' - Lightweight shade canopy, metal frame, polyethylene top	per 1/2 class	\$235
10' x 15' - Lightweight, all-steel carport, metal frame, metal roof	per 1/2 class	\$1,011
30' x 26' - Vertical roof carport, all metal (8' tall legs), customizable size, optional side		
walls (\$330/wall) - bulk discounts available - price includes delivery and installation,		
sales tax is extra; price varied by state	per 1/2 class	\$4,020
30' x 30' - Customizable size - priced for 30x30, metal frame and roof	per class	\$4,425
Yurts		
15' x 15' - Lightweight waterproof cotton canvas camping tent	per 1/2 class	\$500
24' x 24' - Sturdy wood framed/lattice, weatherproof for rain/snow	per class	\$10,000
Shade Sails, Awnings, and Umbrellas		
16' x 20' - Rectangular shade sail, attach to existing buildings	per 1/2 class	\$79
28' - Triangular shade sail, attach to existing buildings	per 1/2 class	\$73
8' x 10' - Retractable fabric patio awning, attach to existing buildings	per 1/2 class	\$200
11' Patio shade umbrella - for use with a picnic table and/or stand	per 2 students	\$100 - \$200
Stands for patio umbrellas - one per umbrella	per 2 students	\$60 - \$120
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Note: Most outdoor classroom configurations that accommodate 12-16 students will be at least 20'-25' in diameter with physisnow shelter is required, plan for a canopy/roof that is 5'-10' wider in diameter than the seating, to allow for movement and a least 30' x 30'. Some shelters may also require side panels.

Item Description	Unit Type	Estimated Price Range Per Unit
Sun Hats Each adult and child may need a hat to reduce UV exposure.		
Bring hats from home (each person supplies their own)	per person	NA
School supplies hats for every person who does not have one, or matching hats for everyone (for equity and school spirit)	per person	\$10 - \$40
Outdoor Handwashing Facilities		

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Portable bottles of hand-sanitizer (no infrastructure) - each student to wash hands 3+		
times/day with hand sanitizer, \$0.02/use with Purell Advanced, as per estimate from	per student per	
National Council for School Facilities	use	\$0.02
Handwashing station (table, cleaning supplies, no plumbing)	per 3 classes?	
Outdoor handwashing sink with 5-6 wash basins (plumbing)	per 3 classes?	
Restroom Access		
Use existing restrooms in school building or park (see note)	per class	\$0
		varies;
		~\$175/month for 10
Rent "port-a-potties" and accompanying hand-washing stations	per 2 classes?	months

OUTDOOR TEACHING MATERIALS AND STORAGE
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Item Description	Unit Type	Estimated Price Range Per Unit
Materials for Teachers		
Outdoor table, for the teacher to use to organize materials	per class	\$150 - \$500
Whiteboard with study base, for use outside	per class	\$40 - \$250
Dry erase markers and eraser (2 sets of 16 markers)	per class	\$25 - \$50
Portable microphone and speaker to amplify the teacher's voice, if needed	per class	\$35 - \$150
Sturdy storage shed (approx. 1 shed per 4 classes)	per grade	\$300 - \$6,000
Materials for Students		
Clipboards for each child	per student	\$1 - \$4
Class sets of: pencils, pens, dry erase markers, pencil sharpeners Not included in this estimate. Assume that existing indoor supplies can be brought outside.	per student	varies
Other class-specific materials (e.g. hand lenses, measurement tools, books, etc.)	per student	varies

LANDSCAPE IMPROVEMENT

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Item Description	Unit Type	Estimated Price Range Per Unit
Container Garden Infrastructure, to create a welcoming environment		
Metal planting beds (galvanized stock troughs), 100 gal 2'x2'x4' example used here -		
many sizes available - most durable option, easy to maintain	per class	\$80 - \$100
Wooden planting beds, made from wine barrels	per class	\$40 - \$50
Large plastic pots (20" diameter or larger)	per class	\$15 - \$25
Garden hose, to connect with accessible hose bib (50'-100' long) - drinking water safe		
hose	per class	\$60 - \$100
Soil and Plants, to fill container gardens		
Large, flowering shrubs, appropriate for local climate	per plant	\$20 - \$40
Potting soil for container gardens (w/o pesticides or chemicals)	per cubic ft	\$3 - \$8

Note: Estimated cost of a basic container garden, placed to surround a new outdoor classroom on asphalt, will be approximate

Item Description	Unit Type	Estimated Price Range Per Unit
Standardized Kits for Each Student		
Backpack	per person	\$20 - \$60

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MOBILE OUTDOOR CLASSROOM GEAR FOR CLASSES THAT MEI	> C

Sun hat	per person	\$10 - \$40
Sunscreen	per student	\$8 - \$20
Clipboard	per student	\$1 - \$4
Writing materials (varies - assuming here 1 pkg pencils/student)	per student	\$3 - \$20
Hand sanitizer bottle, 8 oz	per student	\$7 - \$10
Standardized Kits for Each Teacher		
Wagon, to transport supplies on a walk from the school to the park	per class	\$50 - \$200
Sun hat, with wide brim	per teacher	\$15 - \$30
Sunscreen	per teacher	\$8 - \$20
White board, portable size (if no storage available at the park)	per class	\$75 - \$130
Dry erase markers and eraser (2 sets of 16 markers)	per class	\$25 - \$50
First aid kit	per class	\$25 - \$40
Portable Seating for Students and/or Teachers		
Outdoor seat cushion - stadium style	per student	\$6 - \$40
Outdoor seat cushion - w/backrest	per student	\$16 - \$50
Folding chair - camping style, for younger students	per student	\$15 - \$40
Folding chair - camping style with sunshade, for teachers and/or older students	per person	\$45 - \$220

Estimated cost for a standardized student kit, noted above = $^{\circ}$ \$60 per child and Estimated cost for a standardized teacher k

For more information, please contact:

Sharon Danks, Green Schoolyards America -- sharon@greenschoolyards.org
Andra Yeghoian, San Mateo County Office of Education -- ayeghoian@smcoe.org

http://www.greenschoolyards.org/covid-lear https://sites.google.com/smcoe.org/smcoem planning strategies, to help estimate

Outside as Schools Reopen". Use this document to note of which of these outdoor spaces have is you are considering for each outdoor classroom. g materials and storage, and landscape or classes that will meet in a local park or that will





smaller groups for onsite instruction. For the r 1/2 class, we have used 16 students in the chart

ed on each line. As you refine your own cost t costs below do NOT include sales tax, delivery, or ence only, and are not meant as endorsements of

sion in the coming weeks.

# of Units Needed Per Class	Ur	nit Cost	otal Cost Per lass of 12-16 Students	Number of Classes Per School	To	tal Cost Per School
17	\$	-	\$ -		\$	-
16	\$	7	\$ 107		\$	-
16	\$	16	\$ 256		\$	-

16	\$ 30	\$ 480		\$ -
1	\$ 60	\$ 60		\$ -
16	\$ -	\$ 		\$ -
8	\$ 1,500	\$ 12,000		\$ -
16	\$ 20	\$ 320		\$ -
8	\$ 650	\$ 5,200		\$ -
8	\$ 870	\$ 6,960		\$ -
16	\$ 250	\$ 4,000		\$ -
			Total Seating Cost for Outdoor Classrooms	\$ -

# of Units Needed Per Class	U	nit Cost	Total Cost Per Class of 12-16 Students	Number of Classes Per School	Il Cost Per School
1	\$	320	\$ 320		\$ =
1	\$	2,900	\$ 2,900		\$ -
1	\$	3,300	\$ 3,300		\$ -
1	\$	4,500	\$ 4,500		\$ -
2	\$	1,900	\$ 3,800		\$ -
2	\$	4,800	\$ 9,600		\$ -

2	\$	238	\$	476		\$	-
2	\$	235	\$	470		\$	-
2	\$	1,011	\$	2,022		\$	-
1	\$	4,020	\$	4,020		\$	-
1	\$	4,425	\$	4,425		\$	-
2	\$	500	\$	1,000		\$	-
1	\$	10,000	\$	10,000		\$	_
	7		7			т	
2	\$	79	\$	158		\$	_
2	\$	73	\$	146		\$	_
2	\$	200	\$	400		\$	_
8	\$		\$			\$	_
		150		1,200			-
8	\$	80	\$	640		\$	-
cal distancing mea	asur	es in place.	sun, rain, or	Total Shelter Costs			
dequate protection	n. L	ook for shel	for Outdoor	\$	-		
					Classrooms		

# of Units Needed Per Class	Unit Cost		ded Per		otal Cost Per ass of 12-16 Students	Number of Classes Per School	Total Cost Per School
0	\$	-	\$ -		\$ -		
16	\$	10	\$ 160		\$ -		

	\$ 0.02	\$ -		\$ -
		\$ 		\$ -
		\$ -		\$ -
	\$ -	\$ -		\$ -
0.5	\$ 1,750	\$ 875		\$ -
			Total Health and Hygiene Costs for Outdoor Classrooms	\$ -

# of Units Needed Per Class	U	Init Cost	Total Cost Per Class of 12-16 Students	Number of Classes Per School	То	tal Cost Per School
1	\$	250	\$ 250		\$	-
1	\$	175	\$ 175		\$	-
1	\$	26	\$ 26		\$	-
1	\$	36	\$ 36		\$	-
0.25	\$	300	\$ 75		\$	-
16	\$	4	\$ 62		\$	-
			\$ -		\$	-
			\$ -		\$	-

	Total Outdoor Materials and Storage for	\$ -
	Storage for Outdoor Classrooms	

# of Units Needed Per Class	U	nit Cost		Total Cost Per Class of 12-16 Students	Number of Classes Per School		al Cost Per School	
6	\$	80	\$	480		\$	-	
12	\$	40	\$	480		\$	-	
20	\$	15	\$	300		\$	-	
1	\$	60	\$	60		\$	-	
20	\$	30	\$	600		\$	-	
90	\$	4	\$	360		\$	-	
Ply \$1,500 for planting beds, hose, soil, and plants. Total Landscape Improvement Costs for Outdoor Classrooms								

# of Units Needed Per Class	Uni	t Cost	otal Cost Per lass of 12-16 Students	Number of Classes Per School	Total Cost Per School
16	\$	20	\$ 320		\$ -

00000COVID-19 Planning: Outdoor Classroom Infrastructure Cost Calculator

16	\$	10	\$	160		\$	_
16	\$	9	\$	144		\$	_
16	\$	4	\$	62		\$	1
16	\$	6	\$	96		\$	1
16	\$	8	\$	133		\$	1
1	\$	150	\$	150		\$	1
1	\$	15	\$	15		\$	1
1	\$	9	\$	9		\$	-
1	\$	130	\$	130		\$	-
1	\$	26	\$	26		\$	-
1	\$	35	\$	35		\$	1
16	\$	7	\$	107		\$	1
16	\$	16	\$	256		\$	-
16	\$	30	\$	480		\$	1
1	\$	60	\$	60		\$	
	'		•			'	
it, noted above =	~\$36	55 per teach	ner		Total Landscape Improvement Costs for Outdoor Classrooms	\$	-

Total Infrastructure Cost for	
Outdoor Classrooms	\$ -

<u>n-outside</u>	
environmental-literacy/home	

or mo	re information, please contact:	
haron	Danks, CEO, Green Schoolyards America sharon	@greenschoolvards org
	www.greenschoolyards.org/covid-learn-outside	e greensenooryaras.org
	Yeghoian, Environmental Literacy and Sustainabilit iian@smcoe.org https://sites.google.com/smco	y Coordinator, San Mateo County Office of Education e.org/smcoe-environmental-literacy/home

Potential Sources for the Items Listed in this Chart

Note: The links below are examples of the types of equipment and infrastructure that could be useful for outdoor learning. The vendors and items shown are not meant as endorsements of these particular providers or products. They are simply provided to illustrate each idea. Please select the vendors and products that are right for your own school and context.

https://www.amazon.com/dp/B074C51R3P/ref=cm_sw_em_r_mt_dp_U_3V.4Eb8RJ1GVW https://www.amazon.com/dp/B003399128/ref=cm_sw_em_r_mt_dp_U_x2.4EbSK63Q1S

https://www.rei.com/product/847189/rei-co-op-camp-chair-kids

https://www.dickssportinggoods.com/p/gci-outdoor-sunshade-eazy-chair-17gciusnshdzychrxodr/17gciusnshdzychrxodr

Generally available from local arborists who specialize in large scale tree removal, or local park maintenance departments

Can be produced by local contractors; cost is generally around \$100/linear ft

Available from local farm supply companies; ask for "straw" not "hay" to avoid seeds

https://www.uline.com/Grp 349/Outdoor-Furniture-and-Equipment

https://www.thebenchfactory.com/northgate-park-bench

https://www.amazon.com/dp/B00556W6UQ/ref=cm_sw_em_r_mt_dp_U_2wu6Eb26C6W9X

Links to Examples of Each Item

https://www.thegazebostore.com/commercial-tents/20-x-20-commercial-frame-party-tent-see-through.html
https://www.thegazebostore.com/commercial-tents/20-x-30-commercial-frame-party-tent.html
https://www.thegazebostore.com/commercial-tents/20-x-40-commercial-frame-party-tent.html

 $\frac{https://www.wayfair.com/outdoor/pdp/sol-72-outdoor-pakswith-16-w-x-11-d-aluminum-pergola-with-canopy-w001025655.html}{https://www.wayfair.com/outdoor/pdp/outdoor-living-today-breeze-12-ft-w-x-16-ft-d-solid-wood-pergola-xql1075.html}$

https://www.wayfair.com/outdoor/pdp/shelterlogic-monarc-9-ft-x-16-ft-canopy-shg1614.html

https://www.wayfair.com/outdoor/pdp/king-canopy-universal-105-ft-x-27-ft-canopy-vy1326.html

https://www.garage-organization.com/Product/Arrow-Sheds-CPHC101507.aspx?f=gb&gclid=EAlaIQobChMIj-ff0P2C6gIVDz6tBh1PCgcVEAQYAiABEgKHm_D_B

https://www.carportcentral.com/product-category/carports; https://www.carportcentral.com/product-category/carports/vertical-roof-style

https://www.amazon.com/dp/B07M5GKSF5/ref=cm_sw_em_r_mt_dp_U_YvW5EbGK6N743

https://www.yurts.com/standard-custom-features/

https://www.wayfair.com/outdoor/pdp/colourtree-16-x-20-rectangle-shade-sail-cuor3043.html?piid=50012740

https://www.wayfair.com/outdoor/pdp/colourtree-28-triangle-shade-sail-cuor2829.html

https://www.wayfair.com/outdoor/pdp/outsunny-10-ft-w-x-8-ft-d-fabric-retractable-standard-patio-awning-otsu1288.html?piid=21993076

https://www.wayfair.com/outdoor/pdp/freeport-park-isom-11-market-umbrella-w000985471.html?piid=1429623790

https://www.wayfair.com/outdoor/sb0/patio-umbrella-stands-bases-c434741.html

Links to Examples of Each Item

 $\underline{https://www.amazon.com/dp/B077T5M4C4/ref=cm_sw_em_r_mt_dp_U_uuu6Eb9F077PN}$

See estimates from National Council for School Facilities

We are still researching these costs.

Using existing restrooms will not incur construction costs, so this line item is noted as \$0, but COVID-related cleaning costs will be incurred.

http://www.oaklandportapottycrew.com/portable-toilets-berkeley-ca.html

Links to Examples of Each Item

https://www.ikea.com/us/en/p/bondholmen-table-outdoor-gray-stained-gray-10420562/

 $\underline{https://www.worthingtondirect.com/dry-erase-boards/dura-rite-dry-erase-board-w-abc-trim-by-best-rite.htm}$

https://www.amazon.com/dp/B000J09OLM/ref=cm_sw_em_r_mt_dp_U_Z-u6EbWKVF2YJ

https://www.amazon.com/dp/B06XWV9CCQ/ref=cm_sw_em_r_mt_dp_U_a3V6EbAG9H3X6

 $\underline{https://www.reallygoodstuff.com/double-sided-dry-erase-clipboard/p/164859/?gclid=EAlalQobChMloPG0n6yH6glVviCtBh0ZeABlEAQYEiABEgKx9vD_BwE}$

Links to Examples of Each Item

https://www.agrisupply.com/galvanized-stock-tank/p/14729/

https://www.lowes.com/pd/Real-Wood-Products-25-5-in-W-x-17-5-in-H-Rustic-Weathered-Oak-Wood-Barrel/1000041637

https://www.lowes.com/pd/Garden-Treasures-20-in-W-x-16-75-in-H-Black-Smooth-Plastic-Planter/3880961

https://eartheasy.com/premium-drinking-water-safe-garden-hose/

varies, purchase from a local plant store varies, purchase from a local garden supply store

Links to Examples of Each Item

https://www.amazon.com/dp/B07GBXMWZL/ref=cm_sw_em_r_mt_dp_U_Ytv6EbQ76B781

https://www.amazon.com/dp/B077T5M4C4/ref=cm_sw_em_r_mt_dp_U_uuu6Eb9F077PN

https://www.amazon.com/dp/B002LMJO5M/ref=cm_sw_em_r_mt_dp_U_Cdv6EbCKMBD0B

https://www.reallygoodstuff.com/double-sided-dry-erase-clipboard/p/164859/?gclid=EAlalQobChMloPG0n6yH6glVviCtBh0ZeABlEAQYEiABEgKx9vD_BwE

https://www.amazon.com/dp/B002VL5IJO/ref=cm_sw_em_r_mt_dp_U_Wqv6EbSFV4XW7

https://www.amazon.com/dp/B086R5CHVY/ref=cm_sw_em_r_mt_dp_U_cnv6EbNJ2W7ZW

https://www.amazon.com/dp/B01GJSKY98/ref=cm_sw_em_r_mt_dp_U_4jv6EbA9T8DFF

https://www.amazon.com/dp/B07ZNTGTRJ/ref=cm_sw_em_r_mt_dp_U_lgv6EbP2RHXHV

https://www.amazon.com/dp/B002LMJO5M/ref=cm_sw_em_r_mt_dp_U_Cdv6EbCKMBD0B

https://www.worthingtondirect.com/dry-erase-boards/dura-rite-dry-erase-board-w-abc-trim-by-best-rite.htm

https://www.amazon.com/dp/B000J09OLM/ref=cm_sw_em_r_mt_dp_U_Z-u6EbWKVF2YJ

https://www.uline.com/BL_6704/Uline-First-Aid-Kits

https://www.amazon.com/dp/B074C51R3P/ref=cm_sw_em_r_mt_dp_U_3V.4Eb8RJ1GVW

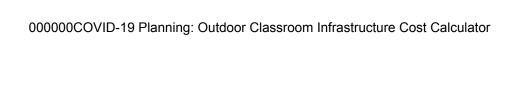
https://www.amazon.com/dp/B003399128/ref=cm_sw_em_r_mt_dp_U_x2.4EbSK63Q1S

https://www.rei.com/product/847189/rei-co-op-camp-chair-kids

https://www.dickssportinggoods.com/p/gci-outdoor-sunshade-eazy-chair-17gciusnshdzychrxodr/17gciusnshdzychrxodr







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