Quiz #1 - LEED BD+C v4

1. Measured performance areas of a Green Building could include which of these? [Choose five]
2. Energy Use
3. Operating Costs
4. Water Use
5. Occupant Satisfaction
6. Carbon Emissions
7. Sustainability
8. When designing a green building to address environmental, financial, and occupant satisfaction issues what type of approach to sustainable design should the team use?
9. Linear
10. Integrated
11. Isolated
12. Collaborative
13. The green building process can be applied to which of these? [Choose five]
14. Buildings
15. Materials
16. Sites
17. Interiors
18. Operations
19. Communities
20. Green building pursues solutions that represent a healthy and dynamic balance between which of these areas? [Choose three]
21. Environmental
22. Recreational
23. Economic
24. Social
25. The triple bottom line concept incorporates a long-term view for assessing potential effects and best practices for what resources? [Choose three]
26. Planet
27. Property
28. Profit
29. People
30. Products
31. The green building process and LEED rating systems first focused on environmental metrics but the list is expanding to encourage indicators in which of these other areas? [Choose two]
32. Social justice
33. Site selection
34. Public transportation
35. World Hunger
36. Public health
37. Studies conducted by the U.S. Environmental Protection Agency (EPA), found that people in the United States spend, on average, what percentage of their time indoors?
38. 25%
39. 50%
40. 75%
41. 90%
42. Which of these strategies describes the main principles of passive design?
43. Capturing wind for cooling
44. Storing renewable energy to use for lighting, heating, and cooling
45. Capturing sunlight and wind for natural lighting, heating, and cooling
46. Using inexpensive fossil fuels for energy use and transportation
47. Buildings and land-use are responsible for contributing to climate change due to which of these environmental impacts?
48. Global Gas Emissions
49. Greenhouse Gas Emissions
50. Carbon Emissions
51. Carbon Offsets
52. When selecting a location for a new green building which of these factors should the design team consider? [Choose three]
53. Climate
54. Nearby recreational facilities
55. Availability of Parking
56. Existing roads and transit
57. Cultural history and traditions
58. What Carpet and Rug Institute (CRI) program set standards for low-emitting carpets, adhesives, and pads?
59. Green Seal
60. Green Guard
61. Green-e Certified
62. Green Label Plus
63. LEED is an abbreviation for?
64. Leadership is Engineering and Energy Design
65. Leadership in Environmental and Engineering Design
66. Leadership in Engineering and Environmental Design
67. Leadership in Energy and Environmental Design
68. Which of these is a LEED main credit category? [Choose two]
69. Sustainable Sites
70. Smart Location & Linkage
71. Awareness & Education
72. Indoor Environmental Quality
73. Water Conservation
74. LEED bonus credit categories are? [Choose two]
75. Neighborhood pattern & design
76. Green infrastructure & buildings
77. Innovation in Design
78. Regional Priority
79. What refrigerant contributes the most to global warming potential (GWP)?
80. HFC-23
81. CFC-12
82. Propane
83. HCFC-123
84. A 12,000 SF commercial office building is being built on previously developed land and the owner would like to LEED certified the project and achieve LEED Gold. Which rating system should the design team recommend the project use?
85. LEED for Homes
86. LEED for New Construction & Major Renovations
87. LEED for Core and Shell Development
88. LEED for Commercial Interiors
89. Why should a green project be located in an existing community?
90. Adequate parking is available on site
91. The zoning approval for the project is easier
92. Native plantings can be used for erosion control
93. The connection to basic community resources is present
94. Graywater is most often used for:
95. drinking
96. irrigation
97. dishwashers
98. swimming pools
99. A general contractor (GC) attempts a credit in Local or Regional Materials and discovers that the specified product has only a portion of the material manufactured within the required radius. What should the GC do?
100. Not list the product
101. Not use the product
102. List the entire product
103. List only the portion within the required radius
104. What is the minimum number of points that a LEED for Schools project must earn to be certified LEED Gold?
105. 40
106. 50
107. 60
108. 70
109. 80
110. In the United States, buildings account for what percentage of potable water consumption?
111. 14%
112. 30%
113. 38%
114. 40%
115. 72%
116. Which of these is a benefit of green buildings? [Choose four]
117. Save energy
118. Use less water
119. Generate less waste
120. Provide more healthful, more comfortable indoor environments
121. Cost less
122. The cumulative effect of conventional building practices has profound implications for human health, the environment and the economy. What term is often used to refer to the concept of sustainability and sustainable design?
123. Triple Crown
124. Triple Bottom Line
125. Triple Top Line
126. Triple Economic Line
127. Passive building design is best described by which of the following?
128. Capturing stormwater and graywater to reduce building water use
129. Capturing wind and rain for natural cooling
130. Capturing sunlight and stormwater for natural lighting and irrigation
131. Capturing sunlight and wind for natural lighting, heating, and cooling
132. LEED honors levels of achievement in what areas? [Choose three]
133. Water Efficiency
134. CO2 emissions reduction
135. Improved indoor environmental quality
136. Using public transportation and riding bicycles
137. Which of these activities contributes to greenhouse gas emissions and climate change? [Choose three]
138. Using electricity to heat and cool buildings
139. Purchasing Conventional Toilets and Urinals
140. Driving to work in automobiles
141. Landfills
142. Which of these statements best defines building commissioning?
143. Systematic improvements in the performance of a building and its energy systems
144. A system used to measure energy consumption associated with buildings
145. Verification after construction that the structure and its systems and subsystems meet project requirements as intended and designed
146. A rating that indicates the efficiency of air filters in the buildings mechanical system
147. Which of these should be considered by the design team when addressing the social context of a project?
148. Climate
149. Roads and transit availability
150. Precipitation
151. Cultural history and traditions
152. How many levels of LEED certification are there?
153. One
154. Two
155. Three
156. Four
157. What does it mean for a project to be net-zero energy?
158. The project uses no grid source energy
159. The project uses only energy that they produce on site
160. The project uses no more energy from the grid than they generate on site
161. The project spends no money on grid source energy
162. Which of these statements is true about U-factor? [Choose two]
163. The higher the U-factor, the better a product is at keeping heat in
164. The lower the U-factor, the better a product is at keeping heat in
165. U-factor measures heat from inside a room that can escape
166. U-factor measures the amount of outdoor heat that can enter a room
167. What is the definition of heat island effect?
168. The absorption of heat by hardscapes, such as dark, nonreflective pavement and buildings, and its radiation to surrounding areas.
169. A measure of how well a material reflects solar heat
170. The reflection of heat by hardscapes, such as dark, reflective pavement and buildings, and its radiation to surrounding areas.
171. Increased temperature, humidity, and air flow ranges within a dense urban area
172. Which of these types of systems is less sustainable?
173. Open System
174. Closed System
175. Negative System
176. Positive System
177. A project design team has convinced the owner to increase the efficiency of the building insulation. What are the main performance benefits from this design strategy? [Choose two]
178. Lower heating and cooling cost
179. Improved acoustical performance
180. Lower building material cost
181. Improved daylighting in the building interior spaces
182. What does Visible Transmittance (VT) measure?
183. How much natural light is blocked from coming through a product
184. The spread spectrum of visible light
185. How much natural light can come through a product
186. The amount of daylighting in a building
187. A LEED project design team is looking for strategies to help introduce more natural daylight into the building. What strategy would you recommend to the team for the building windows to help increase daylighting?
188. Choose windows with a high SHGC
189. Choose windows with a high U-factor
190. Choose windows with a high VT
191. Choose windows with a low VT
192. What organization developed “I-Codes”?
193. ICC
194. IgCC
195. USGBC
196. GBCI
197. At what phase in a project are building costs established and construction contracts signed?
198. Predesign
199. Design
200. Construction
201. Bidding
202. Occupancy
203. An example of a construction soft cost is? [Choose two]
204. Concrete walkway
205. Building steel
206. Structural steel design fee
207. Water closets
208. Litigation fee
209. A LEED for New Construction design team has made changes to a commercial office buildings HVAC system that resulted in requiring the owner to purchase a more expensive unit. Which cost is the owner affected by this change?
210. Life Cycle Costs (LCC)
211. Life Cycle Analysis (LCA)
212. First Cost
213. Design Cost
214. What are the benefits of having at least one charrette early in the design of a LEED project? [Choose two]
215. Helps the team to establish green goals
216. Designs for greening a space can be identified
217. Possible designs for greening a space can be identified
218. Costs for green designs can be determined
219. LEED credits are based on what types of metrics? [Choose two]
220. Qualitative
221. Quantitative
222. Subjective
223. Realistic
224. The percentage of waste materials diverted from traditional disposal methods to be recycled, composted, or re-used is called?
225. Waste Management Rate
226. Reused Rate
227. Waste Awareness Rate
228. Diversion Rate
229. LEED projects can benefit from on-going building performance by implementing what types of measurement and verification systems? [Choose three]
230. Energy submetering
231. Solid waste audits
232. Retrocommissioning
233. Stormwater Pollution Prevention Plan
234. During construction what strategy could help a LEED project meet the owner’s sustainability goal for reducing the amount of construction waste that is deposed of in a landfill?
235. Solid Waste Audit Plan
236. Waste Management Plan
237. Stormwater Pollution Prevention Plan
238. Green purchasing plan
239. What type of indoor air quality pollutant is typically present in paint?
240. MSDS
241. VOC
242. PM-10
243. CO2
244. A building design that uses better insulation and more efficient windows, thus allowing for a smaller heating system has made improvements in which building system?
245. Envelope
246. HVAC
247. Glazing
248. Thermal mass
249. What deliverables should come from the initial project team meeting? [Choose two]
250. HVAC System Design
251. HVAC System Cost
252. Project checklist
253. LEED certification level
254. Designers working to achieve a project’s green building goals should work using what type of building process?
255. Cohabitation
256. Isolation
257. Integrated
258. Co-Located
259. What tool is used at the initial project team meeting to determine the possible LEED credits the project can earn and the level of project LEED Certification?
260. LEED Reference Guide
261. LEED Online
262. Credit Templates
263. Project Checklist
264. A 3-story commercial office building is being constructed on land that previously had a gas station on it. What type of site is this?
265. Previously undeveloped
266. Previously developed
267. Greenfield
268. Brownfield
269. What design practices can help projects to limit the amount of land covered by buildings, pavement, or infrastructure while also better using the space within existing communities? [Choose two]
270. Smart design
271. Smart growth
272. Infill development
273. Infill selection
274. How does the U.S. Environmental Protection Agency (EPA) define a brownfield?
275. Land where development may be complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants
276. Land where development is complicated by the presence of hazardous substances, pollutants, or contaminants
277. Land where development is complicated by zoning issues
278. Land that was previously a landfill
279. In LEED for New Construction what type of project sites are discouraged from being built on? [Choose three]
280. Wetland areas
281. Floodplains
282. Endangered species habitat
283. Brownfields
284. Locating a project near existing infrastructure can help to mitigate which of these design issues?
285. Increased diversity
286. Increased density
287. Suburban Sprawl
288. Stormwater runoff
289. How can project teams reduce transportation effects by building occupants? [Choose three]
290. Allow no parking on the project site
291. Ensure occupants have access to alternative modes of transportation
292. Encourage walking and bicycling
293. Provide fueling facilities for alternative-fuel vehicles
294. Pervious paving areas have site design benefits in which of these areas? [Choose two]
295. Stormwater infiltration
296. Light trespass
297. Protect habitat
298. Heat island effect
299. Which of these are strategies for developing a sustainable site design? [Choose two]
300. Use native and adaptive plants for landscaping
301. Increase hardscape areas
302. Prevent light pollution
303. Eliminate all landscaping from the site
304. Collecting stormwater can help provide a project with the ability to reuse nonpotable water for what purposes? [choose three]
305. Toilet and urinal flushing
306. Swimming pools
307. Custodial uses
308. Landscape irrigation
309. Which of these is a permeable surface? [Choose two]
310. Vegetated roof
311. Asphalt parking lot
312. Grid pavers
313. Green roof
314. What is the definition of heat island effect?
315. Heat island effect, is a decrease in air temperature in a developed area compared with an undeveloped area
316. Heat island effect, is an increase in air temperature in a undeveloped area compared with an developed area
317. Heat island effect, is an increase in air temperature in a developed area compared with an undeveloped area
318. Heat island effect, is a decrease in air temperature in a undeveloped area compared with an developed area
319. What is albedo?
320. Emissivity measurement of a material
321. Reflectivity measurement of a material
322. A measurement of a materials ability to absorb heat
323. A measurement of a materials ability to emit energy through radiation
324. To help mitigate the heat island effect surfaces should have? [Choose two]
325. Low albedo
326. High albedo
327. Low solar reflectivity index (SRI)
328. High solar reflectivity index (SRI)
329. The LEED Sustainable Sites credit section addresses environmental concerns related to?
330. Building landscape, hardscape, and exterior building issues
331. Building water use and disposal
332. Indoor environmental quality
333. Occupants’ health, safety, and comfort
334. Waste disposal, and waste reduction
335. How is the LEED project boundary defined?
336. The entire project site boundary
337. The portion of the project site that is submitted for LEED certification
338. Zoning determines the project boundary
339. The portion of the site directly around the building
340. Which of these is a prerequisite for LEED for New Construction and Major Renovation projects?
341. Environmental Site Assessment
342. Site Master Plan
343. Construction Activity Pollution Prevention
344. Stormwater Management Plan
345. The ESC Plan should address which of the following objectives? [Choose three]
346. Prevention of hardscape and non-native plant use
347. Prevention of soil loss during construction by stormwater runoff and/or wind erosion
348. Prevention of sedimentation of storm sewers or receiving streams
349. Prevention of pollution of the air with dust and particulate matter
350. Which of these sites would be considered inappropriate for building on? [Choose two]
351. Previously developed land that is within 40 feet of a trout stream
352. Land that is within 150 feet of a wetlands
353. Previously undeveloped land that is within 40 feet of a trout stream
354. Land that is within 100 feet of a wetlands
355. Which of these is not considered a basic service for projects earning LEED NC Sustainable Sites credit, Development Density and Community Connectivity?
356. Post Office
357. Church
358. Mini Storage
359. Public Library
360. Fire Station
361. What type of erosion and sedimentation control technology is permanent seeding?
362. Structural
363. Maximization
364. Stabilization
365. Turbidity