

Learning to LEED: Day 2
Sustainable Sites Quiz

1. Number of Prerequisites in the Sustainable Sites category: _____
Number of Credits in the Sustainable Sites category: _____
Number of Points in the Sustainable Sites category: _____

2. For a project pursuing SS Credit 7.1, Heat Island Effect, Non-Roof, what documents or data might a project team be required to submit for LEED certification? (Choose 4.)
 - a. site maps highlighting the location of specific paving materials or landscape shading
 - b. a narrative describing the team's decision process for selecting paving materials
 - c. reflectance and emittance for each paving material installed on-site
 - d. total area of site hardscape to be shaded within five years
 - e. square footage of vegetated roof
 - f. total number of covered parking spaces on-site

3. What is the 100-Year Flood, as defined by FEMA? (Choose 1.)
 - a. the flood elevation with a 1% chance of being met or exceeded each year
 - b. the most significant flood in a 100-year period
 - c. an elevation that is continuously flooded for 100 years
 - d. the flood elevation with a 100% chance of being met or exceeded each year

4. What information is needed to complete the calculations to achieve SS Credit 2, Development Density & Community Connectivity, Option 1? (Choose 3.)
 - a. distance from project entrances to basic services
 - b. total site area in acres
 - c. square footage of public roads within density radius
 - d. total square footage of the building
 - e. square footage of buildings within density radius

5. Urban projects on previously developed sites using vegetated roof surfaces with native or adapted plants to attain SS Credit 5.1, Site Development: Protect or Restore Habitat, must fulfill which of the following requirements? (Choose 1.)
 - a. restore or protect at least 20% of the site area, excluding building footprint
 - b. restore or protect at least 20% of the site area, including building footprint
 - c. restore or protect at least 50% of the site area, excluding building footprint
 - d. restore or protect at least 50% of the site area, including building footprint

6. A technology company has chosen a site designated as a brownfield by the U.S. EPA on which to construct a 24,000 sq.ft. office building. The site is in a well-developed urban area with easy access to public transportation and amenities, and the project team intends to enact parking-sharing agreements with a nearby manufacturing company.

What credits might the project be eligible for? (Choose 4.)

- a. SS Credit 3, Brownfield Redevelopment
 - b. SS Credit 4.4, Alternative Transportation
 - c. SS Credit 2, Development Density & Community Connectivity
 - d. SS Credit 1, Site Selection
 - e. SS Credit 5, Site Development
7. Decreased permeability increases which of the following aspects of stormwater on a site? (Choose 1.)
- a. volume
 - b. frequency
 - c. volume, frequency
 - d. volume, velocity
 - e. volume, temperature, frequency, velocity
8. Within the Sustainable Sites category, which of the following credits can be submitted during the design phase of the project? (Choose three.)
- a. SS Credit 2, Development Density & Community Connectivity
 - b. SS Credit 5.1, Site Development: Protect or Restore Habitat
 - c. SS Credit 4.3, Alternative Transportation: Low-Emitting & Fuel Efficient Vehicles
 - d. SS Credit 6.2, Stormwater Management: Quality Control
 - e. SS Credit 7.1, Heat Island Effect: Non-Roof
9. Which of the following are Basic Services requiring pedestrian access from the project site, according to SS Credit 2, Development Density & Community Connectivity? (Choose 5.)
- a. laundry
 - b. medical/dental
 - c. gas station
 - d. fitness center
 - e. theater
 - f. senior care facility
 - g. police station
 - h. homeless shelter
10. Which compliance paths determine whether a site may attain SS Credit 3, Brownfield Redevelopment? (Choose 2.)
- a. The Energy Policy Act (EPA) of 1992
 - b. ASHRAE/IESNA Standard 90.1-2004
 - c. ASTM E1903-97 Phase II Environmental Site Assessment
 - d. application of local, state, or federal government agency definitions of brownfield

11. A civil engineer might require which of the following information to submit LEED documentation for a project seeking SS Credit 6.1, Stormwater Design: Quantity Control? (Choose 3.)
 - a. frequency of the one- and two-year, 24-hour storms for the site
 - b. percent impervious area of the project site
 - c. percent of water treated to tertiary standards on-site
 - d. pre-development site runoff rate
 - e. stormwater turbidity and temperature
 - f. post-development site runoff quantity

12. According to SS Credit 7.2, Heat Island Effect, Roof, roofing materials having a Solar Reflectance Index (SRI) of 78 or higher for a low slope and 29 or higher for a steep slope should cover how much of the roof surface? (Choose 1.)
 - a. 60%
 - b. 75%
 - c. 80%
 - d. 90%

13. What are three potential strategies for attaining SS Credit 4.4, Alternative Transportation: Parking Capacity? (Choose 3.)
 - a. do not create new parking areas
 - b. consider parking-sharing arrangements with adjacent buildings
 - c. purchase low-emission and fuel-efficient company vehicles
 - d. provide a ride-share board for employees

14. A biomedical research facility will be constructed on a 300-acre site in the Florida panhandle, but as part of an effort to minimize the impact of the project, the building, access roads, parking, and other developed aspects of the site will be limited to approximately 12 acres. The rest of the site has been set aside as a conservation area. For which of the following points would this project be eligible? (Choose 1.)
 - a. SSc5.1: Site Development, Protect or Restore Habitat
 - b. SSc5.2: Site Development, Maximize Open Space
 - c. SSc5.1: Site Development, Protect or Restore Habitat; SSc5.2: Site Development: Maximize Open Space
 - d. SSc5.2: Site Development, Maximize Open Space; IDc1.1: Innovation & Design Process
 - e. SSc5.1: Site Development, Protect or Restore Habitat; IDc1.1: Innovation & Design Process

15. What are the three major intended goals of SS Prerequisite 1, Construction Activity Pollution Prevention? (Choose 3.)
 - a. prevent air pollution from volatile organic compounds released during construction
 - b. avoid air pollution from dust and particulate matter during construction
 - c. prevent soil loss due to stormwater and wind erosion during construction
 - d. limit sedimentation in aquifers and USTs at the construction site
 - e. limit sedimentation, during construction, in storm sewers and nearby streams

16. Which requirement must be met in order to achieve SS Credit 4.1, Alternative Transportation: Public Transportation Access? (Choose 1.)
- locate the project within ½ mile of an existing or planned and funded commuter rail, light rail, or subway station, OR locate the project within ½ mile of one or more stops for two or more public or campus bus lines usable by building occupants
 - locate the project within ¼ mile of an existing or planned and funded commuter rail, light rail, or subway station, OR locate the project within ¼ mile of one or more stops for two or more public or campus bus lines usable by building occupants
 - locate the project within ¼ mile of an existing or planned and funded commuter rail, light rail, or subway station, OR locate the project within ½ mile of one or more stops for two or more public or campus bus lines usable by building occupants
 - locate the project within ½ mile of an existing or planned and funded commuter rail, light rail, or subway station, OR locate the project within ¼ mile of one or more stops for two or more public or campus bus lines usable by building occupants
17. Light pollution is defined as which of the following? (Choose 1.)
- pollution caused by chemicals and gasses given off by artificial lighting
 - pollution by light-weight materials carried by wind
 - glare from sunlight reflection off building windows in urban areas
 - pollution of an ecosystem with light, limiting visibility of night sky views
18. A college campus is constructing a new dormitory to house a large influx of students. In view of the fact that there are no applicable open space ordinances, the project team intends to leave a natural area 50% the size of the building footprint adjacent to the building. Just outside the building entrance is a covered storage area for bicycles, and a short walk further is a large bus stop served by several major campus bus routes. (Choose 2.)
- Which Sustainable Sites points might the dormitory be eligible for under LEED-NC 2.2?
- SS Credit 5.2, Site Development: Maximize Open Space
 - SS Credit 2, Development Density & Community Connectivity
 - SS Credit 4.1, Alternative Transportation: Public Transportation Access
 - SS Credit 4.2, Alternative Transportation: Bicycle Storage & Changing Rooms
19. What site aspects might be counted as open space for attainment of SS Credit 5.2, Site Development: Maximize Open Space? (Choose 3.)
- vegetated roof areas for projects in urban areas
 - vegetated wetlands with a side slope of less than or equal to 1:4
 - vegetated roof areas for projects in open, rural areas
 - pedestrian sidewalks in urban areas, provided a minimum of 25% of open space is vegetated
20. Which of the following referenced standards refers to SSc6.1, Stormwater Management: Quantity Control? (Choose 1.)
- Storm Water Management for Construction Activities
 - Guidance Specifying Management Measures for Sources of Non-Point Pollution in Coastal Waters
 - Definition of Wetlands in the U.S. Code of Federal Regulations
 - There is no standard referenced

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Agenda

1. 1; 8; 14
2. a, c, d, f
3. a
4. b, d, e
5. b
6. a, b, c, d
7. e
8. a, c, d
9. a, b, d, e, f
10. c, d
11. b, d, f
12. b
13. a, b, d
14. d
15. b, c, e
16. d
17. d
18. c, d
19. a, b, d
20. d