

Michigan On The Move
Level 4 Questions

1. One reason sedum was planted on the Living Roof of the Dearborn Truck Plant is

Answer: B

- a. to keep snow off the roof.
- b. to help control water runoff.
- c. to look beautiful.
- d. to make the roof heavier.

Refer to pages 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

2. The moving assembly line allowed workers

Answer: D

- a. to build cars quicker and faster and be sold at a lower price.
- b. to do one task as the car moved along the moving belt.
- c. to stand in one place alongside of the belt.
- d. all of the above

Refer to pages 14-17 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

3. How does the porous pavement at the Ford Rouge Center help the environment?

Answer: D

- a. It makes swamps.
- b. It keeps away birds and insects.
- c. It kills weeds.
- d. It returns clean water to the Rouge River.

Refer to pages 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

4. One advantage of phytoremediation is that it may

Answer: A

- a. help clean soil.
- b. clean the floor of the factory.
- c. use plants to clean the air inside the factory.
- d. keep birds and wildlife away.

Refer to pages 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

5. A conveyor or moving belt that moves cars past workers who each add a part is called

Answer: C

- a. inventing.
- b. recycling.
- c. an assembly line.
- d. vertical integration.

Refer to pages 20-32 CONNECT-IT(tm) ACTIVITIES.

Topic: 2

6. On the Living Roof of the Dearborn Truck Plant

Answer: D

- a. you will find green paint.
- b. trees have been planted.
- c. grass has been planted.
- d. are plants called sedum.

Refer to page "A" Michigan On The Move Fun Folder.

Topic: 1

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7. At 454,000 square feet, the Living Roof at the Ford Rouge Center

Answer: A

- a. is the largest in the world.
- b. is the smallest in the world.
- c. is the same size as a football field.
- d. none of the above

Refer to back cover of the Michigan On the Move Fun Folder.

Topic: 1

8. At 454,000 square feet, the area of the Living Roof at the Ford Rouge Center is equal to

Answer: A

- a. 10.4 acres.
- b. 3 acres.
- c. 5 acres.
- d. 20 acres.

Refer to Ford Rouge Center student page.

Topic: 3

9. The primary function of the Living Roof at the Ford Rouge Center is to

Answer: B

- a. look beautiful.
- b. collect and filter rainfall.
- c. collect the energy from the sun.
- d. provide an area for the workers to eat lunch.

Refer to Ford Rouge Center student page.

Topic: 4

10. The word innovative means trying something that is

Answer: D

- a. new and different.
- b. original.
- c. inventive.
- d. all of the above

Refer to pages 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 2

11. The Living Roof at the Ford Rouge Center

Answer: B

- a. increases heating costs.
- b. insulates the building.
- c. increases cooling costs.
- d. keeps the cost of insulating the building the same as it has always been.

Refer to pages 88-90 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

12. By protecting the underlying roof, the Living Roof at the Ford Rouge Center is expected to

Answer: B

- a. last as many years as a conventional roof.
- b. last twice as long as a conventional roof.
- c. have higher roof replacement costs.
- d. last forever.

Refer to pages 88-90 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

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13. The Living Roof on the Dearborn Truck Plant weighs

Answer: A

- a. less than a conventional roof.
- b. more than a conventional roof.
- c. the same as a conventional roof.
- d. twice as much as a conventional roof.

Refer to pages 88-90 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

14. The Living Roof at the Ford Rouge Center is planted with

Answer: A

- a. sedum.
- b. sedum and grass.
- c. grass.
- d. weeds.

Refer to Ford Rouge Center Student Page.

Topic: 1

15. Rooftop monitors on the Dearborn Truck Plant

Answer: B

- a. bring air into the plant.
- b. bring sunlight into the plant.
- c. keep visitors off the roof.
- d. monitor the amount of rainfall.

Refer to Ford Rouge Center student page.

Topic: 4

16. Part of the "Ford Rouge Factory Tour" includes

Answer: A

- a. walking on an enclosed walkway.
- b. the opportunity to work on an assembly line.
- c. walking in the swales.
- d. taking a helicopter ride to see the roof.

Refer to Ford Rouge Center Student Page.

Topic: 1

17. During a drought, the Living Roof at the Ford Rouge Center will

Answer: C

- a. die.
- b. need to be watered each day.
- c. most likely will not have a problem because the sedum is drought-resistant.
- d. need to be replanted.

Refer to page 94 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

18. The Ford Rouge Center receives approximately _____ of rainfall each year.

Answer: D

- a. 1 inch
- b. 5 inches
- c. 70 inches
- d. 31 inches

Expanding general knowledge.

Topic: 4

Michigan On The Move
Level 4 Questions

19. The Living Roof on the Dearborn Truck Plant can hold enough runoff water to fill almost

Answer: A

- a. six swimming pools.
- b. one swimming pool.
- c. all of the swimming pools in Dearborn, Michigan.
- d. twenty swimming pools.

Expanding general knowledge.

Topic: 3

20. How much soil is on the Living Roof at the Ford Rouge Center?

Answer: A

- a. none
- b. one layer
- c. two inches
- d. eight inches

Inferred from Michigan On The Move Unit

Topic: 4

21. The sedum planted on the Dearborn Truck Plant's Living Roof is planted

Answer: C

- a. in water.
- b. in soil.
- c. on a four layer vegetation blanket.
- d. in soil mixed with vegetation.

Inferred information from Michigan On the Move Unit.

Topic: 4

22. Huge monitors on the roof of the Dearborn Truck Plant could also be called

Answer: D

- a. skylights.
- b. huge windows.
- c. glass panels.
- d. all of the above

Refer to Ford Rouge Center Student Page.

Topic: 4

23. How was the sedum installed on the Living Roof of the Ford Rouge Center?

Answer: C

- a. It was planted on the roof.
- b. It was planted in flowerbeds at the plant.
- c. It was grown on a large field at the Allen Park Clay Mine Landfill.
- d. It was transported from Ohio.

Expanding general knowledge.

Topic: 1

24. The monitors on the roof of the Dearborn Truck Plant provide natural sunlight which

Answer: D

- a. reduces glare.
- b. improves color perception.
- c. reduces eyestrain.
- d. all of the above

Inferred from Michigan On The Move unit.

Topic: 4

Michigan On The Move
Level 4 Questions

25. The Living Roof on the Dearborn Truck Plant will

Answer: B

- a. need mowing.
- b. never need mowing.
- c. need mowing every month.
- d. need mowing every week.

Refer to Ford Rouge Center Student Page.

Topic: 4

26. The Living Roof at the Ford Rouge Center final assembly building

Answer: D

- a. moderates extremely hot and cold temperatures.
- b. reduces expansion and contraction of other roof materials.
- c. protects against UV radiation.
- d. all of the above

Refer to pages 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

27. At the Ford Rouge Visitor Center, sunlight is captured by special _____ and turned into electricity and hot water.

Answer: C

- a. buckets
- b. enamel tubs
- c. photo sensory cells
- d. revolving skylights

Refer to page 69 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

28. The Ford Rouge Center is not an easy place to manage storm water runoff because

Answer: A

- a. it is located in a low-lying area with poorly draining soil.
- b. it is located in a high-lying area with poorly draining soil.
- c. it is not part of a watershed.
- d. there are too many storms.

Expanding general knowledge.

Topic: 3

29. Instead of a chemically based storm water treatment plant at the Ford Rouge Center, Ford designed

Answer: B

- a. a new treatment plant.
- b. a system that mimics nature.
- c. a system that combats nature.
- d. a new water based system.

Inferred from Michigan On The Move unit.

Topic: 3

30. Porous pavement on the shipping lots at the Ford Rouge Center

Answer: C

- a. is not for everyday use.
- b. soaks up and filters soil.
- c. soaks up and filters rain.
- d. is only used for boats by the dock.

Inferred from Michigan On The Move unit.

Topic: 4

Michigan On The Move
Level 4 Questions

31. The storm water management system at the Ford Rouge Center uses natural processes to clean runoff

Answer: B

- a. before you can drink it.
- b. before it is returned to the watershed.
- c. before it is put into holding tanks.
- d. after it reaches the watershed.

Inferred from Michigan On The Move unit.

Topic: 4

32. The natural storm water management system at the Ford Rouge Center does all of the following except

Answer: A

- a. increase the amount of storm water leaving the site.
- b. filter dirt particles.
- c. add oxygen to rivers and lakes.
- d. prevent major flooding.

Inferred from Michigan On The Move unit.

Topic: 3

33. The natural storm water management system at the Ford Rouge Center cost _____ the projected cost of a conventional system.

Answer: A

- a. less than
- b. more than
- c. two times
- d. one hundred times

Inferred from Michigan On The Move unit.

Topic: 3

34. At the Ford Rouge Center, the natural storm water management system

Answer: A

- a. reduces water volume.
- b. increases water volume.
- c. boosts water volume.
- d. adds water volume.

Refer to page 85 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

35. One of the benefits of the natural storm water management system at the Ford Rouge Center is

Answer: C

- a. it discourages wildlife from the area.
- b. it protects the water system from wildlife.
- c. it provides food and shelter for birds and wildlife.
- d. it does not provide food for birds and wildlife.

Refer to page 86 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

36. The natural storm water management system at the Ford Rouge Center does all of the following except

Answer: D

- a. help runoff.
- b. add greenspace.
- c. provide food and shelter for wildlife.
- d. increase runoff.

Refer to pages 83-87 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

Michigan On The Move
Level 4 Questions

37. Swales and wetlands at the Ford Rouge Center catch and clean storm water runoff

Answer: C

- a. chemically.
- b. artificially.
- c. naturally.
- d. totally.

Refer to pages 83-87 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

38. The Ford Rouge Center's Living Roof and porous pavement at the Ford Rouge Center act as

Answer: C

- a. blockades.
- b. barriers.
- c. filters.
- d. walls.

Refer to Ford Rouge Center "a natural storm water system" pages.

Topic: 4

39. The porous pavement lot at the Ford Rouge Center covers over

Answer: D

- a. 16 feet.
- b. 100 ft.
- c. 100 acres.
- d. 16 acres.

Refer to Ford Rouge Center Student Page.

Topic: 3

40. The surface of the porous pavement lot at the Ford Rouge Center is

Answer: C

- a. solid cement.
- b. a thick covering of blacktop.
- c. honeycombed with tiny holes.
- d. pavement.

Refer to Ford Rouge Center Student Page.

Topic: 1

41. Together, the living roof, swales and natural treatment wetlands add many acres of _____ to the Ford Rouge Center.

Answer: A

- a. green space.
- b. brown space.
- c. green grass.
- d. road space.

Inferred from Michigan On The Move unit.

Topic: 1

42. The word swale means

Answer: C

- a. really swell.
- b. drinkable.
- c. wetland-like ditches.
- d. a hard metal.

Refer to page 94 CONNECT-IT(tm) ACTIVITIES.

Topic: 2

Michigan On The Move
Level 4 Questions

43. Solar cells are some of the _____ innovations at the Ford Rouge Center.
Inferred from Michigan On The Move unit.

Answer: B

- a. unsafe
- b. environmentally responsible
- c. future
- d. possible

Topic: 1

44. The Dearborn Truck Plant is able to

Answer: A

- a. make a wide variety of different vehicles.
- b. make only the F-150 truck.
- c. make five different models at the same time.
- d. make only Mustangs.

Refer to Ford Rouge Center Student Page.

Topic: 1

45. Giant _____ window boxes called monitors flood the Dearborn Truck Plant with daylight.

Answer: D

- a. ground-level
- b. suspended
- c. red
- d. rooftop

Refer to page 23-24 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

46. Miller Road is a 1.5-mile "green belt"

Answer: B

- a. used as a parking lot for cars and trucks.
- b. boulevard of trees and plants.
- c. that is a one-way street.
- d. that is a one lane road.

Expanding general knowledge.

Topic: 1

47. Each of the rooftop monitors at the Dearborn Truck Plant is 115 feet long and _____ feet wide.

Answer: C

- a. 50
- b. 35
- c. 25
- d. 22

Refer to page 104 CONNECT-IT(tm) ACTIVITIES.

Topic: 1

48. Monitors and skylights at the Dearborn Truck Plant reduce the need for artificial light on sunny days
resulting in

Answer: C

- a. lower light.
- b. higher electrical energy costs.
- c. reducing the cost of electrical energy.
- d. turning off all lights in the plant.

Inferred from Michigan On The Move unit.

Topic: 4

Michigan On The Move
Level 4 Questions

49. Which of the following is the path storm water takes at the Ford Rouge Center?

Answer: A

- a. living roof, porous pavement, ponds and swales and then to Rouge River
- b. Rouge River to ponds and swales
- c. ponds and swales to porous pavement
- d. none of the above

Refer to page 101 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

50. Approximately how many trees were planted during the revitalization at the Ford Rouge Center?

Answer: D

- a. 15,000
- b. 150,000
- c. 5,000
- d. 1,500

Refer to pages 94-95 CONNECT-IT(tm) ACTIVITIES.

Topic: 3

51. More than _____ honey bees make their home at the Ford Rouge Center.

Answer: C

- a. 200
- b. 2,000
- c. 20,000
- d. 500

Refer to Michigan On The Move Fun Folder.

Topic: 3

52. At the Dearborn Truck Plant, _____ do jobs like welding and windshield installations.

Answer: B

- a. technicians
- b. robots
- c. skilled labor
- d. engineers

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

53. At the Dearborn Truck Plant, operators are using _____ instead of compressed-air tools.

Answer: C

- a. three-dimensional tools
- b. tried and true
- c. electric power tools
- d. pneumatic air tools

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

54. At the Dearborn Truck Plant, vehicles and operators ride on moving platforms called _____ which can be raised or lowered for the operator's safety and comfort.

Answer: D

- a. railroad cars
- b. elevators
- c. doors
- d. skillets

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

Michigan On The Move
Level 4 Questions

55. This process produces high-quality products and also eliminates wasted time, effort and space.

Answer: C

- a. obsolete manufacturing
- b. renewed manufacturing
- c. lean manufacturing
- d. rearranged manufacturing

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

56. _____ meets the needs of the present and keeps in mind the needs of the future.

Answer: A

- a. Sustainable manufacturing
- b. Traditional manufacturing
- c. Ultramodern management
- d. Conservative management

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

57. The jointed mechanical arms that are used to lift and move heavy objects are called

Answer: B

- a. robots.
- b. articulated arms.
- c. hi lows.
- d. elevators.

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

58. In-line vehicle sequencing means

Answer: B

- a. vehicles progress down the line in sequence.
- b. the right vehicle and parts arrive at the same time at the workstation.
- c. the sequence of the vehicles is up to the driver.
- d. the worker decides the vehicle that they will work on next.

Refer to page 3 of the Michigan On The Move Fun Folder(tm)

Topic: 2

59. At the Ford Rouge Visitor Center, rainwater is collected in a 12,500-gallon _____ and used for irrigation.

Answer: B

- a. pond
- b. cistern
- c. pit
- d. ditch

Refer to page 4 of the Michigan On The Move Fun Folder(tm)

Topic: 2

60. Ford Motor Company is experimenting with a system that uses paint fumes to create electricity. It is called _____.

Answer: C

- a. electricity to paint.
- b. paint to fumes.
- c. fumes to fuel.
- d. fuel to fumes.

Refer to page 4 of the Michigan On The Move Fun Folder(tm)

Topic: 1

Michigan On The Move
Level 4 Questions

61. Plants grown in special netting on the outside walls of many of the buildings at the Ford Rouge Center provide

Answer: A

- a. insulation and beauty.
- b. birdcages.
- c. privacy.
- d. heat.

Refer to page 4 of the Michigan On The Move Fun Folder(tm)

Topic: 1

62. The Living Roof atop the Dearborn Truck Plant is as large as a _____ hole golf course.

Answer: B

- a. 3
- b. 9
- c. 5
- d. 4

Refer to the Michigan On The Move Fun Folder(tm)

Topic: 1

63. The assembly line at the Dearborn Truck Plant is over

Answer: B

- a. one mile long.
- b. four miles long.
- c. one hundred yards long.
- d. three blocks long.

Refer to the Michigan On The Move Fun Folder(tm)

Topic: 1

64. A skillet conveyor on the assembly line at the Dearborn Truck Plant can support up to

Answer: D

- a. 400 pounds.
- b. 450 pounds.
- c. 3,000 pounds.
- d. 4,400 pounds

Refer to the Michigan On The Move Fun Folder(tm)

Topic: 1

65. In eight hours, enough vehicles can be manufactured at the Dearborn Truck Plant to stretch bumper-to-bumper over

Answer: B

- a. one half mile
- b. two miles.
- c. ten miles.
- d. one mile.

Refer to the Michigan On The Move Fun Folder(tm)

Topic: 1

66. Nonrenewable fuel sources are

Answer: B

- a. electricity, gas and gasoline.
- b. oil, gas and coal.
- c. limestone, coal and gypsum.
- d. gas, oil and limestone.

Refer to page 69 CONNECT-IT(tm) ACTIVITIES.

Topic: 4

Michigan On The Move
Level 4 Questions

67. Gasoline made from oil is a _____ source of energy.

Answer: C

- a. renewable
- b. replaceable
- c. nonrenewable
- d. alternative

Refer to page 69 CONNECT-IT(tm) ACTIVITIES.

Topic: 4