Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_\_\_\_

Programming in Python – MPA3

\_\_\_\_\_\_\_ 1. What color would be defined by (0, 0, 0)?

 a. black

 b. white

 c. grey

 d. red

\_\_\_\_\_\_\_ 2. A group of statements that exists within a program for the purpose of performing a specific task is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a. function

b. subtask

c. recursion

d. subprogram

\_\_\_\_\_\_\_ 3. The coordinates (0, 0) is also called, the screens \_\_\_\_\_\_\_\_\_.

 a. basis

 b. axis

 c. center point

 d. origin

\_\_\_\_\_\_\_ 4. A bounding box of an object is made up of the objects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a. width and height

b. x and y

c. x\_change and y\_change

d. radius

\_\_\_\_\_\_\_ 5. Where will the center of this ellipse be?

pygame.draw.ellipse(screen, BLACK, [1, 1, 3, 3], 1)

 a. (3, 3)

 b. (2, 2)

 c. (1, 1)

 d. (1, 3)

\_\_\_\_\_\_\_ 6. What is the most common type of file used when playing music?

 a. .wav

 b. .mp3

 c. .mid

 d. all of the above

\_\_\_\_\_\_\_ 7. This is the event from pygame triggered when the user moves the mouse?

 a. MOUSEMOVE

 b. MOUSEMOTION

 c. MOUSEX, MOUSEY

 d. MOUSEHOVER

\_\_\_\_\_\_\_ 8. The method \_\_\_\_\_\_\_\_\_\_\_\_ takes in an x, y coordinate pair, and checks if that pair exists inside the area of a shape.

a. Hitrect

 b. Mousepoint

c. Collidepoint

 d. Hitpoint

\_\_\_\_\_\_\_ 9. When something is triggered in a pygame code, it is called this?

 a. occurrence

 b. module

 c. import

 d. event

\_\_\_\_\_\_\_ 10. The part of the program that looks closest to the front of the screen is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a the background

b. the foreground

c. the top index

d. incorrect, because there is no depth on a computer screen.

\_\_\_\_\_\_\_ 11. \_\_\_\_\_\_\_\_\_\_ is the rapid display of images in a specific order that give the illusion of movement.

 a. animation

 b. movement

 c. collision

 d. simulation

\_\_\_\_\_\_\_ 12. Each location in multiple image picture is commonly called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 a. rect

 b. pos

 c. frame

 d. pixel

\_\_\_\_\_\_\_ 13. Everytime through the game loop is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 a. iteration

 b. annotation

 c. concatenation

 d. round

\_\_\_\_\_\_\_ 14. What color would be defined by (0, 0, 255)?

 a. red

 b. blue

 c. green

 d. random color

\_\_\_\_\_\_\_ 15. If the screen width and height are both 400 pixels, and a rectangle is drawn starting at (0,400), where will it display?

 a. upper left

 b. lower right

 c. center

 d. It won’t display

\_\_\_\_\_\_\_ 16. In computer graphics, as x coordinate increases and y coordinates decreases in value, a point will move:

 a. up and to the left

 b. down and to the right

 c. up and to the right

 d. down and to the left

\_\_\_\_\_\_\_ 17. This event is generated when the user closes the window.

 a. END

 b. CLOSE

 c. QUIT

 d. DELETE

\_\_\_\_\_\_\_ 18. FPS stands for

 a. frames per second

 b. flips per second

 c. fast paced sprites

 d. frames per sprites

\_\_\_\_\_\_\_ 19. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the speed at which an animation is played,

a. sprite clock

b. frame rate

c. image tick

d. MPG rate

\_\_\_\_\_\_\_ 20. This loads the pygame module into the current program.

 a. input

 b. quit

 c. import

 d. init

\_\_\_\_\_\_\_ 21. This draws content of one Surface object onto another Surface object

a. blit

b. draw

c. create

d. put

\_\_\_\_\_\_\_ 22. When code detects the intersections of two or more objects, it is called?

 a. collision

 b. bounding

 c. impact

d. fender bender

\_\_\_\_\_\_\_23. This is the event that is triggered when a key on the keyboard is released.

 a. K\_UP

 b. KEYUP

 c. K\_DOWN

 d. KEYDOWN

\_\_\_\_\_\_\_ 24. What function allows us to resize a crab picture object on the screen?

 a. pygame.transform.resize(crab)

 b. pygame.transform.spin(crab)

 c. pygame.transform.scale(crab)

 d. pygame.transform.rotate(crab)

\_\_\_\_\_\_\_ 25. This is a series of images combined into a larger image

 a. image diagram

 b. cel matrix

 c. bitmap

 d. sprite map

\_\_\_\_\_\_\_ 26. A method of surface which creates a rectangular object in the dimensions of itself.

 a. getwrecked()

 b. get\_rect()

 c. rect\_get()

 d. get\_rectangle()

\_\_\_\_\_\_\_ 27. If a box is drawn starting at (x,y) coordinate (0,0), where will it be on the screen?

 a. center

 b. upper left

 c. lower left

 d. lower right

\_\_\_\_\_\_\_ 28. The part of the program that looks closest to the back of the screen is the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a the background

b. the foreground

c. the top index

d. incorrect, because there is no depth on a computer screen.

\_\_\_\_\_\_\_ 29. Which of the following codes will get the current mouse position and returns the position as a list of two numbers

a. pos = pygame.mouse.get\_pos()

 b. pos = pygame.mouse.get\_location()

 c. pos = pygame.mouse.get\_loc()

 d. pos = pygame.mouse.get\_position()

\_\_\_\_\_\_\_ 30. What color would be defined by (155, 155, 155)

a. black

b. gray

c. white

d. seniors sunburn

\_\_\_\_\_\_\_ 31. In pygame the acceptable image file type(s) is/are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 a. .jpg

 b. .bmp

 c. .png

 d. all are acceptable

\_\_\_\_\_\_\_ 32. Mouse event 3 represents what action?

 a. right button

 b. left button

 c. scroll wheel moved up

 d. middle button

\_\_\_\_\_\_\_ 33. The code used to retrieve and store an images size is?

 a. get\_box()

 b. get\_size()

 c. get\_rect()

 d. get\_area()

\_\_\_\_\_\_\_ 34. This is commonly used to clear the screen.

 a. screen.clear()

 b. screen.init()

 c. screen.quit()

 d. screen.fill()

\_\_\_\_\_\_\_ 35. A clock event is called a

 a. tick

 b. tock

 c. tac

 d. millisecond

\_\_\_\_\_\_\_ 36. This function gets the state of the mouse buttons?

 a. mouse\_pressed()

 b. mouse\_down()

 c. get\_pressed()

 d. get\_mouse()

\_\_\_\_\_\_\_ 37. When dividing up a sprite map, you would use a \_\_\_\_\_\_\_\_\_\_ sequence

 a. string

 b. tuple

 c. list

 d. dictionary

\_\_\_\_\_\_\_ 38. Images are made up of dots called \_\_\_\_\_\_\_\_\_\_.

 a. pixels

 b. twips

 c. sprites

d. specks

\_\_\_\_\_\_\_ 39. A music object method which plays a music is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 a. music.play()

 b. music.mixer.play()

 c. pygame.music.mixer.play()

 d. pygame.mixer.play()

\_\_\_\_\_\_\_ 40. This is generated when a mouse button is released in the window.

 a. MOUSEPRESSED

 b. MOUSEBUTTONUP

 c. MOUSEBUTTONPRESSED

 d. MOUSEBUTTONDOWN

\_\_\_\_\_\_\_ 41. Mouse event 2 represents what action?

 a. right button

 b. middle scroll button

 c. scroll wheel moved up

 d. scroll wheel moved down

\_\_\_\_\_\_\_ 42. What code will draw a line from x, y coordinates (0, 0) to (100, 100)?

 a. pygame.draw.line(GREEN, screen, 0, 0, 100, 100, 5)

 b. pygame.draw.line(screen, GREEN, 0, 0, 100, 100, 5)

 c. pygame.draw.line(screen, GREEN, [0,0,100,100], 5)

 d. pygame.draw.line(screen, GREEN, [0, 0], [100, 100], 5)

\_\_\_\_\_\_\_ 43. What does this code do?

pygame.display.flip()

 a. flips the screen from top to bottom.

 b. flips the screen from left to right.

 c. clears the screen.

 d. displays everything that has been drawn so far.

\_\_\_\_\_\_\_ 44. What does the following code mean?

 Pygame.init()

 a. declares an integer variable called pygame

 b. installs the pygame library

 c. initializes the pygame module

 d. states that Pygame is inside

\_\_\_\_\_\_\_ 45. What is the main program loop?

 a. It runs once for the entire game.

 b. It processes user input, updates objects, and draws the screen each frame of the game.

 c. It loops once for each level of the game.

 d. It loops once for each life that the player has.

Part Two: Welcome to code country

Finish the code that will animate the globe.png with a size of 600 by 800.

Create a font and text saying “The Earth” and then show it on the screen.

Change the background to display a random color every time it completes a rotation.

import pygame

pygame.init()

done = False

framecount = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

globe = pygame.image.load(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

screen = pygame.display.set\_mode((600,600))

clock = pygame.time.Clock()

globe\_frames = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

globeW, globeH = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

fw = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

fh = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

while not done:

 for event in pygame.event.get():

 if event.type == pygame.QUIT:

 done = True

 pygame.display.flip()

 clock.tick(10)

pygame.quit()