Classes Activity

Name:_____

Part 1:
Consider the class that I have written below and answer the following questions:

```
class Coin:
    def __init__(self, screen_width, screen_height):
        self.radius = random.randint(5, 50)
        x = random.randint(self.radius, screen_width - self.radius)
        y = random.randint(self.radius,
              screen_height - self.radius)
        self.position = [x, y]
        vel_x = random.uniform(-5, 5)
        vel_y = random.uniform(-5, 5)
        self.vel = [vel_x, vel_y]
        r = random.randint(50, 255)
        g = random.randint(50, 255)
        b = random.randint(50, 255)
        self.color = [r, g, b]

    def draw(self, surf):
        pygame.draw.circle(surf, self.color,
              self.position, self.radius)

    def update(self):
        self.position[0] += self.vel[0]
        self.position[1] += self.vel[1]
        self.hidden = 'hi!'
```

1. What is the name of the class?

2. What methods does the class have?

3. What attributes does the class have?

4. Create an instance of the class

Part 2:

In your group, come up with an object or idea that you'd like to represent as a class.

Once you have your idea, I want you to sketch the outline of the class below. In particular, I want three things:

1. The name of the class
2. A (mostly) complete __init__ method, including what attributes we're storing
3. Function *signatures* for all other methods (their names and arguments). For now, each method should just `pass` (feel free to add more if you have time)

Part 3:
Trade this paper to another group. Other group, write your names below:

Look through the syntax of the class above. How does it look? Please point out things that are off.

What do you think of their interface? Do they have appropriate methods and attributes? What is missing or confusing?