



```

@Override
public void takeDamage(int rawDamage, DamageType damageType) {
    if (!isAlive()) return;

    // 1. Dodge Calculation
    int effectiveHitChance = Math.max(5, 100 - (dodgeStat - enemyAccuracy));
    if (new Random().nextInt(100) + 1 > effectiveHitChance) {
        System.out.println(getName() + " dodged the attack!");
        return;
    }

    int damageAfterArmor = 0;
    if (!isArmorPiercing) {
        damageAfterArmor = Math.max(0, rawDamage - armor);
    }

    int damageToHP = 0;
    if (isShieldPiercing || this.currentShield == 0) {
        damageToHP = damageAfterArmor;
    } else {
        int damageAbsorbedByShield = Math.min(damageAfterArmor, this.currentShield);
        this.currentShield -= damageAbsorbedByShield;
        damageToHP = damageAfterArmor - damageAbsorbedByShield;
    }

    this.currentHP -= damageToHP;
    if (this.currentHP < 0) {
        this.currentHP = 0;
    }
    System.out.println(getName() + " took " + rawDamage + " damage!");
}

```

```
damageType type, boolean isArmorPiercing, boolean isShieldPiercing, int  
  
    , Math.min(100, attackerAccuracy - getEffectiveDodge())); // Clamp be  
    effectiveHitChance) {  
        "dodged the attack!"); // Or log to combat display  
  
  
  
rawDamage - getEffectiveArmor());  
  
  
currentShield <= 0) {  
  
    Math.min(damageAfterArmor, this.currentShield);  
    damageAbsorbedByShield;  
    damageAbsorbedByShield;  
  
  
  
    log " + damageToHP + " damage. HP: " + currentHP + "/" + getMaxHP());
```


