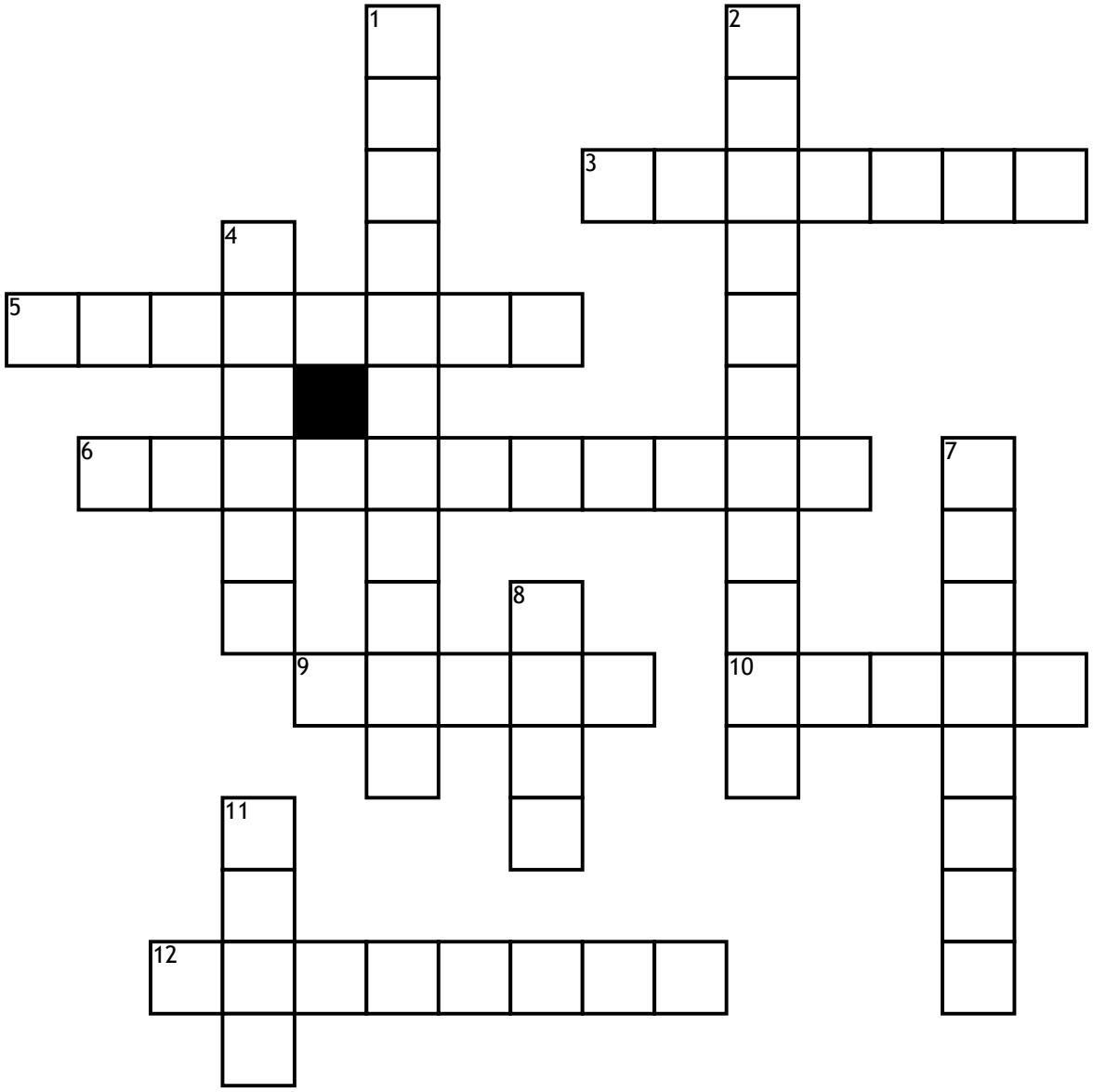
Name: _____ Date: _____

Pharmacodynamics



Across

3. 6. In determining the best dosage range for a specific new drug, a team of researchers tries to determine the lowest plasma concentration that still produces the drug effect they're looking for. Their calculations will, they hope, give them the _____ effective concentration.

5. 1. Drug A takes 5 hours to move from onset of action to the time when its effects can no longer be seen. Drug B takes 3 hours. Drug B has a shorter _____ of action.

6. 1. Sometimes, especially in the beginning of administration of a new drug regimen, the patient and physician must work together to determine what concentrations of drug in the bloodstream produce the desired effect, but without toxicity. The dose range they are seeking will put the plasma concentrations in the _____ range.

9. 2. Mrs. Pitt is having very serious adverse reactions to the new drug she is taking. She goes into shock and is rushed to the emergency room, where the medical team determines that the drug Mrs. Pitt is taking has reached its _____ level of serum concentration.

10. 3. Doug determines the relative safety of a drug in terms of a ratio between its lethal dose and its effective dose. This measure is called the therapeutic _____.

12. 5. The time it takes for the amount of a specific drug's concentration in the plasma to decline by 50% is its biologic _____.

Down

1. 3. Doug tries to evaluate how long a new drug remains effective in the body. He does this by plotting on a graph the points at which the drug's effect can no longer be demonstrated in the subjects who are taking it. Doug is pinpointing the _____ of action.

2. 2. After his car accident, Mr. Tripp is prescribed diazepam to help him relax. However, because he is still upset after leaving the emergency room, he stops for a drink on his way home. Shortly after Mr. Tripp arrives home, his wife finds him comatose on the bedroom floor and calls an ambulance. Mr. Tripp has experienced a _____ combination.

4. 6. Doug is testing a new drug to see how long it takes, once the drug is administered, for the first signs of effect. He refers to this as the _____ period.

7. 4. Mr. Flack discovers that he keeps having an immune-mediated response against the drug he is taking. This is a(n) _____ reaction.

8. 5. The closer that the ratio between lethal dose and effective dose is to 1, the more likely you may _____ your patient at the same time you are trying to cure him or her.

11. 4. Mrs. Pitt is taking a drug for which her blood levels are monitored on a weekly basis. Her physician explains that it is important that they determine the maximum amount of drug concentrated in her blood at any given time; this is the _____ serum concentration.