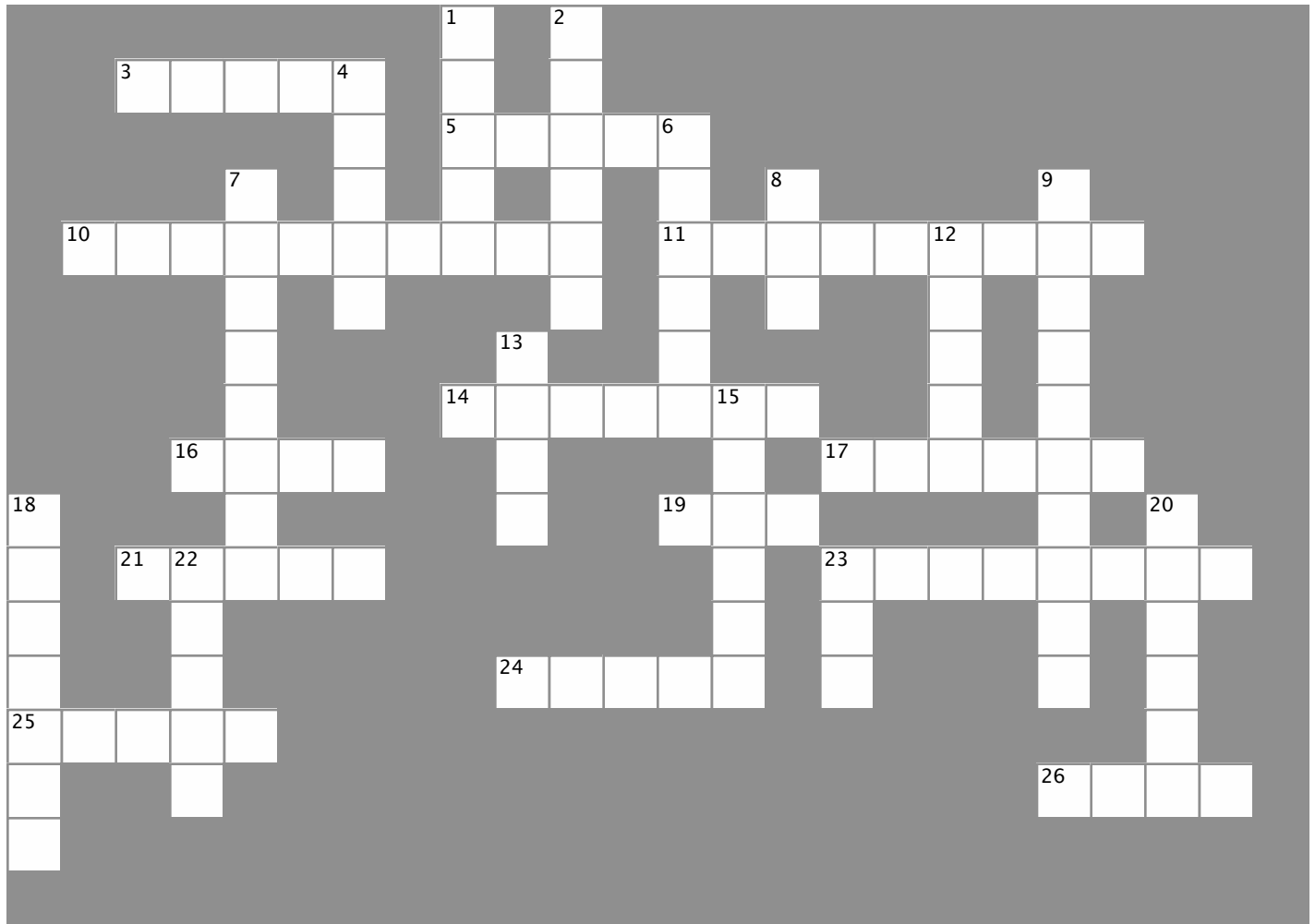


Quiz I: Not what you were expecting

PHI02-I / LeClair
Summer II 2008



Across

3. Only one thing can go the cosmic speed limit.
5. The correct unit for distance.
10. When you do this, your motion is not covered by special relativity.
11. Absolute timing is out the window, but this is preserved
14. Time intervals for moving observers, compared to those at rest
16. The correct unit for mass.
17. You seem thinner, but only along your direction of
19. The correct unit for time.
21. Even in relativity, kinetic energy depends on this. Its just more complicated
23. You are here.
24. There are this many of you, roughly (multiple of ten).
25. You have this many lab TAs.
26. The units of gamma

Down

1. This is both the time dilation and length contraction factor
2. Convertible into energy
4. This many observers, and we need the velocity addition formula
6. Featured prominently in many relativity examples
7. All motion is
8. Earth revolves around it
9. This type of observer measures "proper" quantities
12. Its speed is our only invariant
13. The president of the university
15. Einstein's most famous equation relates mass to this
18. A spaceship is moving toward you at high speed. Compared to seeing the ship at rest, it is ...
20. This is the correct unit for temperature
22. This week's lab
23. Relies on relativity for its fantastic accuracy