1. Give two payoffs for understanding users.

2. Expand any 5 of the following acronyms:
   (more than 5 correct = 5, wrong ones count negative)
   - UCD/HCD
   - PQ4R
   - SDT
   - WM
   - LTM
   - CREAM
   - JND
   - HF
   - HSI
   - RSI

3. Name one result from Byrne's paper that has implications for interface design.

4. What are the ABCS?
5. One version of Fitts' Law is $\text{Time} = 70 \text{ ms} \times \log_2 (\text{target distance} / \text{target size} + 0.5)$. Note two implications for menu design.

6. Note two advantages of haptic interfaces and two disadvantages.

7. Suppose you want to provide the user with real-time updates on outside temperature in a non-verbal format. Pick one of the following modalities and explain in 1-2 sentences why they are suited to this task: (a) Touch, (b) Sight, (c) Hearing.

8. Describe the tradeoff between studying large and small numbers of users.
9. Explain the difference between Internal validity and External validity

10. Explain the Pop-out Effect. Give one application of this effect.

11. How can you help direct the user’s attention on a search engine?

12. How can you help users make better decisions? (one major way)
13. Describe two implications of learning for interface design.

14. Name two ways to study errors.

15. Describe and draw the learning curve.

16. What can you learn by studying a log of searches?
17. Describe one way knowledge about the user can be organized besides the ABCS.

18. Why are multiple-choice exams seen as easier than short answer exams?

19. Using terms from the ABCS, describe how distractions can disrupt learning.

20. What is the most important cognitive dimension to consider when developing smartphone applications, and why?