Readings Study Questions, lecture 30

1. How do patients with visual agnosia demonstrate that there is a dissociation between processing that detects low-level or basic visual forms, and processing that is responsible for visual object recognition?

2. What are thought to be the relative roles of the "what" and "where" systems of visual information processing? To what extent are these two systems physically segregated in the brain? What are the differences in the receptive field properties between cells in the "what" and "where" systems?

3. Contrast the grandmother cell and ensemble coding theories of object recognition.

4. Describe experiments with combined lesions (p.171, also in lecture notes) that showed that the ventral ("what") pathway involves bilateral inputs.

5. Describe "object constancy". What sources of variability must object recognition overcome?

6. How might object recognition take advantage of invariant properties of an object (p.179)?