Chapter 5 Practice Test nb
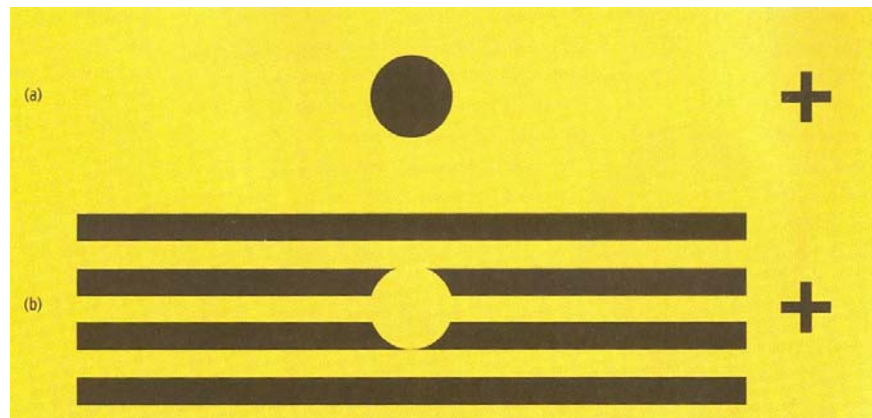
1. Circle T of F for each of the statements below.

    T F Sensation occurs when our mind is aware of and interprets the meaning of
            external stimuli (light waves, sound waves, etc)

    T F Sensation occurs when receptors are stimulated thus allowing external stimuli to
            become neural signals (action potentials) in the brain.

    T F Perception occurs when our brain takes sensations (nerve impulses) and
            interprets them or gives them meaning.

    T F Perception occurs before sensation. In other words, we first must perceive
            something before we can sense it.

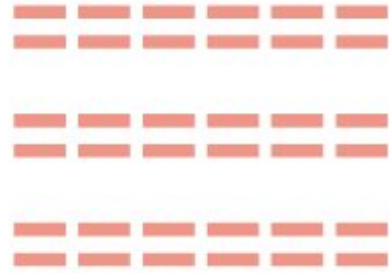   T F Sensation and perception are the same thing

2. When we look straight at an image, light waves from that image are falling on a part of the retina

    called the _____ and the receptors that predominate there are called _____. Those receptors

    allow us to see the colors in the image. But as we focus directly at the object, we can still see stuff
    to either side. We are less likely to see the color of that peripheral stuff. But we can still see that
    stuff that's peripherally located because of receptors called _____.

3. If you close your right eye and stare at the + on the top right and move the paper slowly towards
    your eyes, you will find a distance where the black circle disappears. How can we account for this?
    Circle all the statements below that apply.

    T F Because our eyes are not perfectly circular, our left eye can't detect circles at certain
            distances.

    T F When the black circle disappears, the image of the circle is falling on an area of the
            retina where there are no rods or cones because that area is where nerves take
            information out of the eye to the brain.

    T F We have a blind spot. It happens to be in both eyes.

    T F When the paper is a certain distance from the eyes, the brain merges the top black
            circle with the yellow circle below. The result is we don't see any circle.

4. Notice the image at the right. We tend to see the lines as 3 pairs of rows instead of 6 rows or 6 columns. This is accounted for by which Gestalt principle?
   a. Closure
   b. Continuity
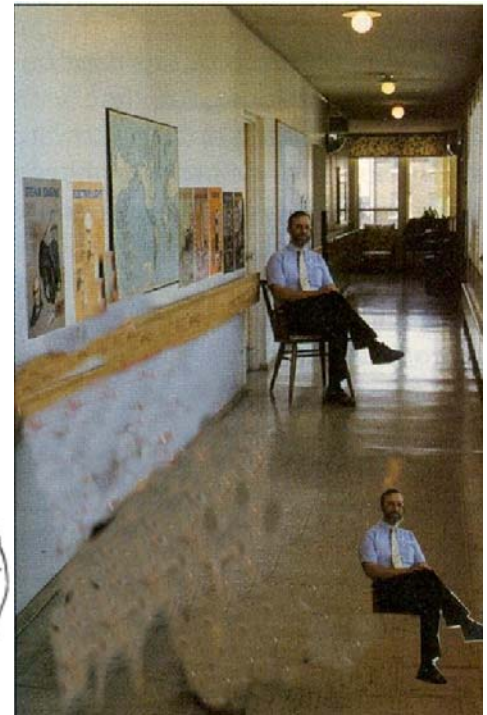   c. Nearness or Proximity
   d. Common region
   e. Similarity

5. If you hold your thumb right in front of your nose and then open and close each eye, you will notice that your thumb 'jumps' back and forth. Now hold your thumb at an arm's distance from your eye and do the same thing. It will jump back and forth, but much less so. Your brain uses this information to help it tell that your thumb is farther away in the second example. This illustrates the depth cue of:
   a. Convergence
   b. Binocular disparity or retinal disparity
   c. Height in plane
   d. Motion parallax
   e. Overlap

6. Where are the hearing receptors?
   a.   They are connected to the hammer, anvil, and stirrup. When these bones move, they move the receptors causing action potentials.
   b.   They are just behind and connected to the eardrum. When the eardrum vibrates, it pushes on them and they fire action potentials.
   c.   The receptors are hair cells in the inner ear inside a fluid filled structure called the Cochlea. Vibrations cause the hair cells to move causing action potentials.
   d.   none of the above is correct.

7. When presented with the scene at the right, with one eye closed you are able to tell which wheels are closer to you and which are farther (depth perception). You are able to do this because of which depth cue?
   a. Retinal disparity
   b. Convergence
   c. Overlap or interposition
   d. Figure and ground
   e. Closure

8. When asked to describe the figure at the right, We don't often say one line bends and runs from 1 to 3 while the other bends and runs from 4 to 2. And we don't usually see the image as 4 lines meeting in one spot. Instead, most people would say it consists of 2 crossing lines: One line running from 1 to 2 and another from 3 to 4. We usually see it this way because of which Gestalt Organizing Principle?
   a. Closure
   b. Similarity
   c. Continuity
   d. Figure and ground

9. See the figure below at the right. We see two men in ties. They both project the same size image on the retina yet the top man is perceived as normal height and the lower man is perceived as a "little person". 2 monocular depth cues are responsible for this. What are they?

_____

_____

10. Even though the drawing below is only 2 dimensional, the brain gives it the illusion of depth.
Circle all the depth cues that are present in the drawing that help give the illusion of depth.
   a. Linear perspective
   b. Relative size
   c. Overlap or interposition
   d. Continuation
   e. Nearness or Proximity

See the picture of the eye at the right.

11. In order to see the dog most clearly, it's image should
     be placed on spot A   B   C   D (circle one)

12. If the dog image falls on spot A   B   C   D , (circle one)
      you won't be able to see it.

13. In spot A   B   C   D, we have the most cones. (circle one)

14. In spot A   B   C, we have less cones and more rods
   . (circle one)

15. In spot A   B   C   D, we don't have any rods or cones.
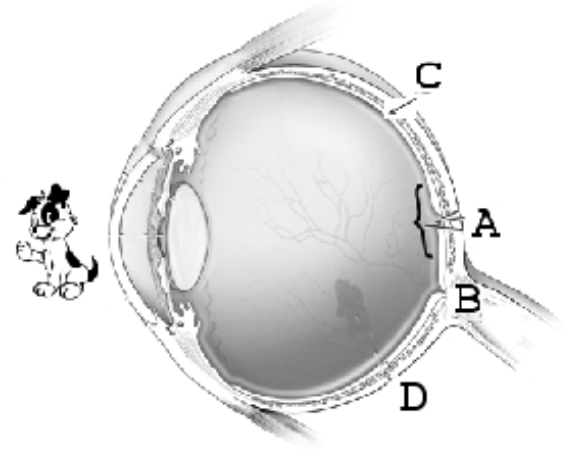   (circle one)

16. the fovea is in spot A   B   C   D   (circle one)

17. If you wanted to see what color the dog's collar was you would put his image on spot A   B   C   D
     (circle one)

18. Assume it was very low light and you wanted to see the dog as best as possible. But when you looked
     directly at him you could just barely see him. If you wanted to try and see him better, you might try
     putting his image on spot A   B   C (circle one)

19. Your new roommate has very smelly feet and socks. At first you could hardly stand it, but after a little
bit of time, you don't even notice it anymore. What principle in the book is this?
        a. difference threshold
        b. sensory adaptation
        c. lateral inhibition
        d. bottom up processing
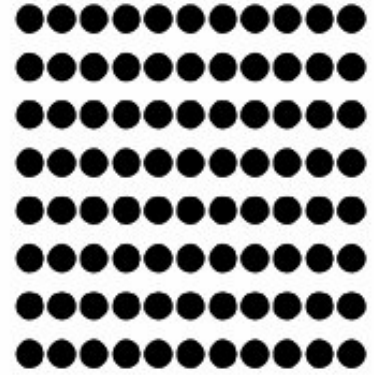
Practice Test Tie Breaker

1. In the picture at right, people are asked to
    name the 3 objects from left to right.
    Most would say **A-B-C**,
    but some might say **A-13-C**. Fill in the
    blanks below with either of these words:
    Top-down,   OR **Bottom up.**

_____ processing leads us to say ABC, whereas

_____ processing leads us to be unsure and just as likely to say A-13-C as A-B-C.

2. When people are asked what they see in the image at the right, they usually report they see " 8 rows" of dots instead of "11 columns" of dots. Which Gestalt organizing principle is responsible for this?
    a. Proximity (nearness)
    b. Similarity
    c. Continuity
    d. Closure
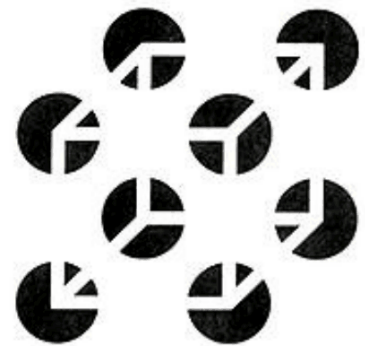   e. figure and ground
    f. linear perspective

3. You are listening to a song that is played at 25 decibels. Your roommate turns the sound up but you don't notice he is doing that until the song reaches 30 decibels. Using your knowledge of Weber's Law, you know that if you were listening to a song at 10 decibels, the volume would have to increase to _____ decibels in order for you to detect it was louder.

Sudden Death

1. See the pic at the right of 2 kangaroos. If asked which one looks bigger, most people would respond that the one more in the center of the picture (touching the sky) looks bigger. But if you measure them, you'll see they are the same size. What illusion is this most similar to?
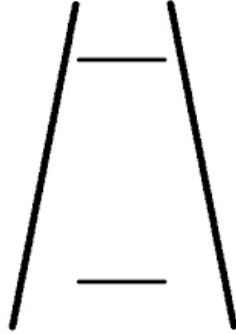
2. See the object at the right. You can see a square because of the Gestalt Organizing Principle of:
    a. Convergence
    b. Shape Constancy
    c. Closure
    d. Nearness

3. When you put a picture together that you have never seen before, you will be using _____ processing.

    a. bottom up processing
    b. top down processing
    c. left right
    d. selective
    e. deductive

4. In the figure directly below, the top horizontal line appears longer than the bottom line. What would make this illusion go away?
   a. Add a horizontal line in between the top and bottom line
   b. Take away the lines that go up and down.

5. See the figure at the right. What Gestalt organizing principle leads us to see 6 columns instead of 6 rows?
   a. Proximity
   b. Relative size
   c. Similarity
   d. Closure
   e. convergence