DEMOS & CLASSROOM ACTIVITIES--SENSATION AND PERCEPTION

I. Topic: Sensory Processes Involved in Vision

II. Purpose: To help students learn the complex vocabulary used in describing visual sensory processes.

III. Description: Matching Exercise

A common complaint among students about introductory psychology is that there are so many terms to learn. No where is this more true than in the biological phenomena covered in introductory psychology. Included among these topics is vision. This matching exercise will aid students in learning the terminology used to describe visual sensory processes.

IV. Procedure:

1. Have students complete the following matching exercise by following the directions.

Instructions: Next to each term, place the letter of the statement that best corresponds to the term.

_____Wavelength  _____Astigmatism  _____Optic Nerve
_____Light Adaptation  _____Saturation  _____Myopia
_____Accommodation  _____Brightness  _____Opponent-Process Theory
_____Retina  _____Lens  _____Brightness Contrast
_____Fovea  _____Cornea  _____Hue
_____Trichromatic Theory  _____Amplitude  _____Hyperopia
_____Acuity  _____Dark Adaptation  _____Purity
_____Pupil  _____Cones  _____Blind Spot
_____Iris  _____Rods

a. The psychological counterpart of wavelength; often referred to as color.
b. The point at which the optic nerve leaves the back of the eye.
c. A small muscle that relaxes or contracts in response to the amount of light passing through the cornea.
d. Farsightedness.
e. The process our eyes go through adapting to decreased levels of illumination.
f. The transparent structure at within the eye that changes shape, depending on whether we are looking at objects far away or nearby.
g. A visual disorder caused by a misshapen cornea.
h. In a beam of light, the distance between two crests.
i. Light-sensitive receptors found in the retina, but not the fovea.
j. Hering's theory that there are 3 sets of color receptors in the visual system. Stimulation of one member of a set produces the sensation of the corresponding color.
k. Keenness of vision.
l. The thin layer of receptors, the rods and cones, that lines the
interior of the back of the eye.
m. The number of wavelengths found in a beam of light.
n. The small area forming the center of the retina.
o. The process by which the lens focuses light on the retina.
p. The phenomenon in which a color looks brighter as the background color becomes darker.
q. The opening of in the eye that controls the amount of light entering the eye.
r. The psychological counterpart of purity.
s. The main neural pathway that carries visual information from the eye to the brain.
t. The process by which our eyes adapt to increasing levels of illumination.
u. The psychological counterpart to amplitude.
v. Nearsightedness.
w. Young and Helmholtz's theory that human eye has receptors sensitive to red, green, and blue.
x. The transparent fluid-filled cover at the front of the eye through which light passes.
y. The height of a wave of light.
z. Color sensitive receptors found primarily in the fovea.

H  Wavelength
G  Astigmatism
S  Optic Nerve
T  Light Adaptation
R  Saturation
V  Myopia
O  Accommodation
J  Opponent-Process Theory
U  Brightness
L  Retina
F  Lens
P  Brightness Contrast
N  Fovea
X  Cornea
A  Hue
W  Trichromatic Theory
Y  Amplitude
D  Hyperopia
K  Acuity
D  Dark Adaptation
M  Purity
Q  Pupil
Z  Cones
B  Blind Spot
C  Iris
I  Rods
I. Topic: Anxiety-Based Disorders

II. Purpose: To help students recognize the symptoms of anxiety-based disorders.

III. Description: Problem-Solving Worksheet

Below are 5 short case studies of individuals suffering from different forms of anxiety. After reading each case, students will offer their "diagnosis" of the disorder described in the case study.

IV. Procedure:

1. Hand out the worksheet to the students in your class and have them complete the assignment, either in class or as a take-home assignment. When students are finished, discuss their responses together as a class in the attempt to further their understanding of this class of disorders.

Correct Answers:

Case Study 1: Obsessive-Compulsive Disorder
Case Study 2: Psychogenic Fugue
Case Study 3: Generalized Anxiety Disorder
Case Study 4: Hypochondriasis
Case Study 5: Phobic Disorder (In This Case, Agoraphobia)

Instructions: Below are 5 case studies of different persons suffering from different forms of mental disorders. Your task is to state or describe what disorder you think each person is suffering from based on the case study.

Case Study 1

Zelda is extremely concerned with cleanliness. In fact, before she retires at night, she goes through a cleaning ritual of her clothes and body that sometimes lasts for up to 2 hours. If she misses a step in the ritual or performs part of it imperfectly, she starts the ritual all over again.

Case Study 2

Monica is suffering from a form of amnesia. She has deliberately left her hometown moved to another city 350 miles away, and has assumed a new identity, a new job, and even new personality characteristics.
Case Study 3

Alex periodically suffers from extremely high levels of anxiety but he cannot pinpoint the source or otherwise say why he is so anxious. He is terrified at times, his heart often races, he feels wobbly, and has difficulty concentrating.

Case Study 4

Karen worries excessively about developing a rare disease. When she meets friends or writes letters to her relatives, she is constantly discussing how she feels and expresses concern that even the most minor irregularities in the functioning of her body are symptoms of underlying diseases. She spends a good deal of time consulting doctors for a second opinion.

Case Study 5

Terry complains that he is experiencing recurrent episodes of lightheadedness, rapid breathing, and dizziness, especially as he attempts to leave his house. The symptoms have become so severe that, in fact, he is leaving his house less and less frequently. He now only goes the grocery store in the company of his sister. Once in the store, he checks immediately for the exits and windows.
I. Topic: Identification of Different Forms of Therapy

II. Purpose: To help students learn differences in the approaches in different therapies to solve personal problems.

III. Description: Problem-Solving Worksheet

IV. Procedure:

1. Hand out the worksheet to the students in your class and have them complete the assignment, either in class or as a take-home assignment. When students are finished, discuss their responses together as a class in the attempt to further their understanding of how practitioners of different forms of therapy approach treatment in different ways.

Correct Answers:

Therapist 1: Rational Emotive Therapy
Therapist 2: Psychoanalysis
Therapist 3: Client- or Person-Centered Therapy
Therapist 4: Systematic Desensitization

Instructions: Below are 4 brief descriptions of how different therapists might approach a problem for which you have sought their help. Your task is to state or describe what kind of therapy each therapist is using to help you solve your problem.

Therapist 1:

Your therapist counsels you that it is impossible for you to be loved or cared for by all people who are significant at your job and in your community. She further urges you to abandon the irrational approach you take to interpreting the events that occur in your life.

Therapist 2:

Upon entering his office, your therapist asks you to sit down and be comfortable. He then tells you that you should speak freely, and not to worry about censoring any thoughts you may have during the therapy session. He sits behind you to minimize any eye contact—he does not wish to serve as an authority figure during your session. At one point he cautions you about becoming defensive and suggests that you might be unconsciously attempting to block his access into gaining insight into the inner workings of your thought processes.

Therapist 3:
After spending some time with your therapist, it becomes obvious to you that she believes you are making unrealistic comparisons between the person you are and the person that you would like to be. You find that she mirrors many of your statements, as if asking you to reflect upon what you have just said. At the same time, you are convinced that she holds you in high esteem, no strings attached.

Therapist 4:

After confessing to your therapist that you are horribly afraid of bees, he works with you to construct a hierarchy of stimuli that are increasingly fearful to you. Lowest in the hierarchy is reading the word buzz and the highest on the list is seeing a bee flying close to your face. Once the hierarchy is completed, he teaches how to feel relaxed to these stimuli, starting first with the stimuli to which you are least afraid.
I. Topic: Health and Stress

II. Purpose: To help students realize the connection or link between certain risk factors and their physical health.

III. Description: Handout/Worksheet

This worksheet summarizes the primary risk factors involved in the relationship between stress and health.

Completed Outline:

<table>
<thead>
<tr>
<th></th>
<th>Good Health</th>
<th>Poor Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Appraisal of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Stressors:</td>
<td>Not Threatening</td>
<td>Threatening</td>
</tr>
<tr>
<td>Life-style Factors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Smoking</td>
<td>No or Moderate Drinking</td>
<td></td>
</tr>
<tr>
<td>Healthy Diet</td>
<td>Unhealthy Diet</td>
<td></td>
</tr>
<tr>
<td>Physically Fit</td>
<td>Physically Unfit</td>
<td></td>
</tr>
<tr>
<td>Coping Strategies:</td>
<td>Effective</td>
<td>Ineffective</td>
</tr>
</tbody>
</table>

IV. Procedure:

1. Pass this worksheet out to students and ask them to complete as per directions.

Instructions: Psychological research over the past two decades has established a clear relationship between stress and physical health. Below you will find an incomplete outline of this relationship. Your task is to fill in blanks in the table to form a complete summary of this relationship.
Coping Strategies:
(Effective or Ineffective)
I. Topic: Stages of Piaget's Theory of Cognitive Development

II. Purpose: To help students learn the key characteristics and time span of the stages of cognitive development as proposed by Jean Piaget.

III. Description: Handout/Worksheet

When completed correctly, this simple worksheet will provide students a quick and handy overview of Piaget's theory of cognitive development.

IV. Procedure:

1. Pass out the worksheet to students and have them complete as per the instructions.

Instructions: For each of Piaget's 4 stages, complete the table below by providing the approximate age range in which each stage occurs and what the key characteristics of each stage.

<table>
<thead>
<tr>
<th>Stage or Period</th>
<th>Approximate Age Range</th>
<th>Key Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensorimotor</td>
<td>0-2</td>
<td>Object permanence; deferred imitation; basic symbolic thinking</td>
</tr>
<tr>
<td>Preoperational</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Operational</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Operational</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>Age</td>
<td>Characteristics</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Preoperational</td>
<td>2-7</td>
<td>More advanced symbolic and logical thinking; egocentrism; cannot master conservation problem</td>
</tr>
<tr>
<td>Concrete Operational</td>
<td>7 to 11</td>
<td>Now masters conservation problem; decreased egocentric thinking; understands categorization</td>
</tr>
<tr>
<td>Formal Operational</td>
<td>11 through adulthood</td>
<td>Thinks and reasons abstractly</td>
</tr>
</tbody>
</table>
I. Topic: Damage to the Brain and its Effects on Behavior

II. Purpose: To aid student understanding of the strong links between brain structure and function and behavior.

III. Description: Handout/Worksheet

This worksheet contains 3 short problems for students to solve. Each problem describes a specific brain injury and its effects on behavior. The student's task is to identify the brain area correlated with the injury and those effects.

Answers to problems: (1) cerebellum; (2) hippocampus; (3) Broca's area (frontal lobe of left hemisphere)

IV. Procedure:

1. Have students work through each problem. When they are finished with all the problems, have students share their answers. Open discussion to the connection between damage to specific brain areas and its effects on subsequent behavior.

Instructions. Below are 3 problems. Each describes a brain injury and its effects on behavior. Your task is to identify the precise area of the brain that has been damaged.

1. Linnea fell while skiing this past winter. When she fell, she hit the back of her very sharply against the ice on the slope. She now has difficulty moving about; her movements are jerky and she has to concentrate hard to make even the simplest of movements.

Answer:______________

2. Kip was in car accident recently. He seems okay except that he has a very difficult time remembering things. He can remember things that happened in his life prior to the accident; his difficulty appears to be in forming new memories.

Answer:______________

3. To pay her way through college, Shawna took a part-time job in the evenings working in a small factory. While she was working, the factory caught fire and there was an explosion before she could escape to safety. The explosion caused a small piece of metal to lodge deeply in
her left frontal lobe. Although she made a complete recovery otherwise, her ability to use language was forever changed; she could not express herself at all--she could only utter one or two words.

Answer:____________
I. Topic: Sensation Seeking Personality

II. Purpose: To give students an opportunity to assess themselves on an interesting dimension of personality--sensation seeking and to learn a bit more about how psychologists seek to measure personality characteristics.

III. Description: Handout

This handout contains a 13-item survey and an explanation for scoring it.

IV. Procedure:

1. Ask students to complete the handout given below and to self-score it using the accompanying key.

2. Discuss with your class what sensation seeking is, some of its characteristics, and how instruments such as the one below attempt to tap into this dimension of personality.

Instructions: Circle A or B for each item, depending on which best describes you. When finished, score yourself using the scoring key given at the bottom of the page.

1a. I would like a job that requires a lot of traveling.
1b. I would prefer a job in one location.

2a. I am invigorated by a brisk, cold day.
2b. I can't wait to get inside on a cold day.

3a. I get bored seeing the same old faces.
3b. I like the comfortable familiarity of everyday friends.

4a. I would prefer living in an ideal society in which everyone is safe, secure, and happy.
4b. I would have preferred living in the unsettled days of our history.

5a. I sometimes like to do things that are a little bit frightening.
5b. A sensible person avoids activities that are dangerous.

6a. I would not like to be hypnotized.
6b. I would like to have the experience of being hypnotized.

7a. The most important goal in life is to live it to the fullest and experience as much as possible.
7b. The most important goal in life is to find peace and happiness.

8a. I would like to try parachute-jumping.
8b. I would not like to try jumping out of an airplane, with or without a parachute.

9a. I enter cold water gradually, giving myself time to get used to it.
9b. I like to dive or jump right into the ocean or a cold pool.

10a. When I go on vacation, I prefer the comfort of a good room and bed.
10b. When I go on vacation, I prefer the change of camping out.

11a. I prefer people who are emotionally expressive even if they are a bit unstable.
11b. I prefer people who are calm and even-tempered.

12a. A good painting should shock or jolt the senses.
12b. A good painting should give one a feeling of peace and security.

13a. People who ride motorcycles must have some kind of unconscious need to hurt themselves.
13b. I would like to drive or ride a motorcycle.

Scoring Key:

Give yourself 1 point for each of these that you have circled: 1a, 2a, 3a, 4b, 5a, 6b, 7a, 8a, 9b, 10b, 11a, 12a, 13b. Sum your score

Compare your score with the norms for this test:

0-3 points Very low in sensation seeking
4-5 Low
6-9 Average
10-11 High
12-13 Very high in sensation seeking
DEMOS & CLASSROOM ACTIVITIES--MOTIVATION & EMOTION

I. Topic: Theories of Motivation

II. Purpose: To help students define and understand better the differences among the major theories of motivation.

III. Description: Handout

IV. Procedure:

1. Pass out the handout below to your students and ask them to describe the major emphasis of each of the 7 major theories of motivation in the space provided. Next, ask them to apply each of these theories to understanding and solving the problem listed in the handout. Ask students to bring their completed worksheets back to class. Discuss with students how the theories differ from one another and their usefulness in understanding or solving particular problems.

Directions: Fill in the Blanks and write a short essay regarding these as instructed below.

<table>
<thead>
<tr>
<th>THEORY:</th>
<th>BEHAVIOR IS MOTIVATED PRIMARILY BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instinct</td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td></td>
</tr>
<tr>
<td>Need</td>
<td></td>
</tr>
<tr>
<td>Incentive</td>
<td></td>
</tr>
<tr>
<td>Expectancy</td>
<td></td>
</tr>
<tr>
<td>Optimal Arousal</td>
<td></td>
</tr>
<tr>
<td>Opponent-Process</td>
<td></td>
</tr>
</tbody>
</table>

Sara has been smoking since she was 13 years old. She is now 16. Most of her friends smoke. She enjoys smoking, particularly when she is around her friends and after she has finished a test or class project. She has thought about quitting, but the more her parents put pressure on her to quit, the more she wants to keep smoking. Explain both the origination of Sara's smoking and her hesitancy to quit in terms of each of the theories you have described above.

<table>
<thead>
<tr>
<th>THEORY:</th>
<th>BEHAVIOR IS MOTIVATED PRIMARILY BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instinct</td>
<td>Innate factors; genetics</td>
</tr>
<tr>
<td>Drive</td>
<td>Drive reduction; physiological processes maintain homeostasis</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Need</td>
<td>Basic physiological or learned needs must be satisfied</td>
</tr>
<tr>
<td>Incentive</td>
<td>Seeking of rewards; avoidance of punishers</td>
</tr>
<tr>
<td>Expectancy</td>
<td>Our thoughts about what we think will happen will influence our behavior</td>
</tr>
<tr>
<td>Optimal Arousal</td>
<td>We learn to engage in behaviors that maintain an optimal level of arousal</td>
</tr>
<tr>
<td>Opponent-Process</td>
<td>We learn to engage in behaviors that maintain a stable level of emotionality</td>
</tr>
</tbody>
</table>

No answer key is given for the problem to be solved since such a wide variety of correct answers may be provided by students.
I. Topic: Reliability and Validity in Measuring Intelligence

II. Purpose: To help students understand better the nature of reliability and validity in measuring psychological phenomena, in this case, intelligence.

III. Description: Handout

Reliability and Validity are often difficult concepts for student to apply in their thinking about tests and measurements. This handout asks students to identify particular problems to which one old, but very interesting, measure of intelligence is susceptible.

IV. Procedure:

1. Ask students to read the following handout and reply to the questions it contains. Have students share their answers to these items in class. Discuss with them the meaning of the terms reliability and validity and how they apply to Morgan's procedure in his research on intelligence.

S. G. Morgan, a well-known 19th century scientist argued that intelligence among different races differs as a function of head size—the larger the head, the more intelligent the person. Extending this logic, if people of a particular race tend to have larger heads that people of another race, then its members may be said to be more intelligent than members of that other race. To test his ideas, he gathered craniums from different human races and filled them with sifted mustard seed. He then poured the sifted seed back into a graduated cylinder to determine the skull's volume in cubic inches.

State Morgan's hypothesis.

Was Morgan's method a reliable measure of intelligence--why or why not?

Was Morgan's method a valid measure of intelligence--why or why not?
I. Topic: Common Drugs and Everyday Student Activity

II. Purpose: To help students become more aware of their use of common drugs, the activities that serve as antecedents to their use, and the consequences of using them.

III. Description: Outside of Class Activity

IV. Procedure:

1. Have students keep a log of their daily use of caffeine, alcohol, and nicotine. Give the entry sheet described below to your students. Place several entry forms on a single page and run off as many copies as you need. (Assuming that you can fit 3 entry forms on a page, and that students may use up to two pages per day, run off 14 pages per student as a minimum. Depending on their level of drug use, particularly for students who use tobacco products, you may need to have more forms available.)

2. Ask them to record their daily activities for a 7 day period. This will help them become more aware of how much they are using these particular drugs, what kinds of activities takes place immediately before using the drugs, and the nature of the consequences result from using the drug.

3. Have students bring their logs back to class after 7 days. Discuss what your students found in terms of the causes and consequences of drug use.

Daily Log
Antecedents and Consequences of Drug Use:
Caffeine, Alcohol, and Nicotine

Day: M T W H F SA SU

Time: ____________

Drug Used: ____________

Psychological, Behavioral, or Environmental Antecedents (What things were going through your mind, what were you doing, or what was going on around you immediately before you used the drug):
Psychological or Behavioral Consequences (What resulted from the drug use? Emotionally, how did you feel during and after the drug use?)
I. Topic: Chunking and Memory

II. Purpose: To show students how chunking increases our capacity for remembering based on the creation of meaningful word units.

III. Description: Demonstration

Phrases, strings of letters, lists, and other similar classes of things to be remembered are easy to learn and later recall by using the method of chunking.

IV. Procedure:

1. On an overhead, place the following sentence in large, preferably font size 14 or larger:

   Th era inhe lpsf arm ersgr owcro ps.

   Give the students about 30 seconds to attempt to memorize the sentence. Ask them to repeat it back to you the best they can and inquire as to how difficult this task was.

2. On a separate overhead, place the following sentence, (again in a large font):

   The rain helps farmers grow crops.

   Explain to them that this is the same string of letters you asked them to recall on the first overhead. They should immediately recognize how forming letters into meaningful units facilitates remembering
DEMOS & CLASSROOM ACTIVITIES--SOCIAL PSYCHOLOGY

I. Topic: Competition, Selfish Behavior, "Tragedy of the Commons" Behavior

II. Purpose: To introduce students the "tragedy of the commons," or degradation of a natural resource due to selfish behavior in a competitive situation.

III. Description: Demonstration (Materials needed: a large bowl, 20-30 paper clips, pennies, or computer diskettes (or 10 of any other class of similarly sized objects), a watch, and a medium size table or desk.)

This demonstration is based in part on Garrett Hardin's now classic paper, "The tragedy of the commons" published in Science in 1968 (Volume 162, pp. 1243-1248) and on Edney's 1979 "Nuts Game, which is an analog to the dilemma Garrett described (see J. J. Edney, The nuts game: A concise commons dilemma analog in Environmental Psychology and Nonverbal Behavior, Volume 3, pp. 252-254.)

Basically, the tragedy of the commons occurs when people have equal access to shared resources (such as land). Each member of the group then acts to maximize his or her "investment" using that resource, which results in the degradation of the resource. The cause: each person acts in his or her self-interest, overlooking the fact that overuse of a resource will in the end may destroy it.

IV. Procedure:

1. Ask 4 volunteers to come to the front of the class. Have them stand around a medium size table so that they are facing the other class members.

2. On the table place a large bowl. In the bowl place 10 of anything--paper clips, pennies, computer diskettes, or any other similarly sized class of objects.

3. Explain aloud to the volunteers, so the other members of the class can hear, that the game they are about to play has only 2 rules.

Rule #1: The number of objects (whatever they may be) left in the bowl at the end of every 10 seconds will double.

Rule #2: The object of the game is to acquire as many objects in the bowl as possible.

4. Ask the volunteers if they understand the rule (they almost always do). Tell them the game will begin when you say go.

5. Say "GO!"

6. Monitor your watch carefully. When 10 seconds are up, stop the game and double the number of objects that are still in the bowl. If objects remain in the bowl, continue to play the game for several more rounds and pay careful attention to the strategy used by the volunteers to play the
game. (You may ask students to explain their strategy, which may turn out to be a potential way to prevent the tragedy of the commons from occurring.)

However, chances are that there will be no objects left in the bowl. That is, as soon as you said, "GO," each volunteer dove his or her hands into the bowl attempting to get as many objects as possible before the other volunteers did (i.e., competitive behavior), causing the game to end prematurely. The volunteers are quick to remember Rule #2 but forget almost completely about Rule #1.

In this game, the objects represent some renewable resource, such as land or trees. The key to being renewable, of course, is that there must be something to renew. But because the students acquired all of the objects in the bowl, there was nothing left to renew, which models Hardin's point very nicely.
DEMOS & CLASSROOM ACTIVITIES--PSYCHOLOGY: INTRODUCTION

I. Topic: Schools of Psychology

II. Purpose: To help students understand better the distinction among the various schools of psychology.

III. Description: Classroom Activity.

One way to make classroom discussion of the schools of psychology come alive is to ask several students to volunteer to read this section of the introductory chapter especially closely the night before class and come to class prepared to “act out” how key figures from each school might interpret particular issues, ideas, or problems.

IV. Procedure:

1. Have each of 7 students read the section of the introductory chapter of your text that covers the following schools: structuralism, functionalism, behaviorism, psychodynamic, Gestalt, humanistic, and cognitive.

2. At the same time, assign specific students to play the role of specific spokespersons from each of the schools (i.e., William James, James Watson, and so on) in a class discussion during a subsequent class meeting.

3. Provide these students a description of some issue or problem that you would like them to address from the point of view of the specific school each is representing. You could have them address an almost infinite variety of issues and problems, but here are 3 suggestions to give you some ideas. Give them the description in advance so that they will have time to think it through from their particular perspective.

* The experience of seeing a red ball and learning to identify or name the ball by its color.

* What motivates some students to do well in school and why other students are not motivated?

* How to break a habit, such as nail biting or cigarette smoking.

4. Give each student 1-2 minute for his or her remarks. You may ask the class to pose these students questions to deepen the discussion.