

Performance  
Assessment Activity

## 8

## Perception Tests

**Background**

The United States Air Force has high standards for its pilots. Much emphasis has been given to the excellent vision required of recruits. For example, you must have 20/20 vision and excellent figure-ground perception. In addition to vision, other senses that must function at the highest levels include hearing, the vestibular system, and kinesthesia. To qualify to train as a pilot, the recruit must take a series of tests. If a deficiency is found on any of the tests, the recruit will not be admitted to pilot training.

**Task**

You are part of the human resources staff for the United States Air Force. You have been appointed to a task force that develops perceptual tests for Air Force recruits. The tests are designed to determine if recruits have the necessary perceptual skills to go to pilot training school. The task force designs the tests and sets the minimum standards for acceptance into the training program.

**Target Audience**

The audience will be Air Force officers who approve tests, and, secondarily, the new Air Force recruits.

**Objectives**

The purpose of this activity is to gain experience in designing and using perception tests.

**Procedure**

1. Select one of the following senses for your sample test: vision, hearing, vestibular system, or kinesthesia.
2. Based on what you have read in the text, design a test that shows how well a person's sense is functioning. If necessary, conduct additional research on ways to test a person's senses. Although the test may be challenging, it must not put any recruit at risk of harm.
3. Decide what you think should be the minimum acceptable standard for acceptance into the pilot training school.
4. Using at least five students in your class as the potential recruits, conduct the test.
5. Evaluate the results by assessing which students would meet the perceptual qualification for a pilot recruit.
6. If none of the participants meets the minimum standard, assume that you have made the test too difficult. Modify the test and have five additional participants take the revised test.
7. If all of the participants meet the minimum standard, assume that the test is too easy. Modify the test to make it more challenging. Have five additional participants take the revised test.

**Assessment**

1. Use the classroom Assessment Lists to evaluate your test.
2. Discuss what you might do differently for a similar project in the future.

A graphic consisting of a grey, rounded rectangular shape with a white rectangular box in the center. The box contains the text 'Performance Assessment'. Below the box, there are four small, dark grey triangles pointing to the right.

## Performance Assessment

# Scoring Rubric

*Use with Activity 8*

### A Test

- S** The test has a unique or creative design. The difficulty level of the test has been thoroughly tested to make the results reliable. The test is suitable as a model of excellent work.
- T** Overall, the test design is excellent. It accomplishes its purpose and is easy to administer. The test is valid for its intended purpose. The test document has been used with a variety of participants and adjusted for difficulty. The test instructions are clear and concise. The proper format is used throughout. There are no typographical errors.
- U** The test is similar to one receiving a rating of T, except there are one or two important elements that are less polished.
- V** The test is similar to one receiving the rating of W, except it has one or two areas that are better developed.
- W** The test design is weak. It does not test the topic adequately. The test is not valid or reliable to use with its intended audience. The test is not well organized. The test instructions are unclear or wordy. The test has not been tested on participants or adjusted for difficulty. The proper format is not used. The work contains typographical errors that interfere with the usability of the test. The work is not neat and presentable.
- X** The test is incomplete or extremely weak in most or all areas.

**Graphic Organizer Activity**

**8**

**Human Senses**

**Directions:** Humans have several different senses. Each sense uses different receptors. The different receptors are triggered by different stimuli. Complete the graphic organizer by listing five of the senses in the first box of each column. Then list the receptors each sense uses and the type of stimuli needed to trigger that sense.

<b>Sense</b>	<b>Sense</b>	<b>Sense</b>
↓	↓	↓
<b>Receptors</b>	<b>Receptors</b>	<b>Receptors</b>
↓	↓	↓
<b>Stimuli</b>	<b>Stimuli</b>	<b>Stimuli</b>

  

<b>Sense</b>	<b>Sense</b>
↓	↓
<b>Receptors</b>	<b>Receptors</b>
↓	↓
<b>Stimuli</b>	<b>Stimuli</b>

