**Name:**

**Operational Definitions, IVs, DVs, & Hypotheses**

**Directions: Identify the independent variable (IV) and the dependent variable (DV) for each of the research scenarios and give the operational definition for each. Additionally, provide a hypothesis for each research scenario.**

1. A developmental psychologist is interested in how the activity level of four-year-olds is affected by viewing a 30minute video of the SpongeBob SquarePants or a 30-minute video of Sid the Science Kid.

**IV:**

**Operational definition of IV:**

**DV:**

**Operational definition of DV:**

**Hypothesis:**

2. A psychiatrist wants to test the impact of a new drug designed to increase the ability of teenagers with ADHD to take accurate notes in class.

**IV:**

**Operational definition of IV:**

**DV:**

**Operational definition of DV:**

**Hypothesis:**

3. A biopsychologist wants to know whether exposure to testosterone in adult female rats increases their aggressive behavior

**IV:**

**Operational definition of IV:**

**DV:**

**Operational definition of DV:**

**Hypothesis:**

4. An industrial/organizational psychologist believes that cooling the temperature of a room may have an impact on productivity of workers on an assembly line.

**IV:**

**Operational definition of IV:**

**DV:**

**Operational definition of DV:**

**Hypothesis:**

**PART II –**

**Measuring the Dependent Variable**

**Types of Dependent Variable**

In psychological research, there are several ways that a dependent variable can be measured. Most commonly, researchers choose one of the following types of measurement:

* Behavioral Measures: Measurement or assessment of a person’s behavior
* Attitudinal Measures: Measurement or assessment of a person’s feelings toward a particular topic
* Cognitive Measures: Measurement or assessment of a person’s mental ability (e.g., memory or intelligence)
* Physiological Measures: Measurement or assessment of a biological characteristic (e.g., heart rate, galvanic skin response)

**Type of Measurement**

In addition, there are common ways to measure the above types of dependent variables.

* Percent Correct: an average of correct response to overall responses represented as a percentage
* Frequency of response: sum of the number of times a person or group responds to a question
* Degree of response: measure of the intensity of the response an individual has to a question

**Practice Measuring the Dependent Variable**

**For each of the examples below, identify which type of measure is being used (behavioral, attitudinal, cognitive, or physiological) and the way the measure is being assessed (percent correct, frequency of responding, or degree of response).**

1. Prof. Johns wanted to measure the way his students feel about various student resources on campus, especially the Learning and Resource Center (LRC). As a preliminary step, Prof. Johns measures the percent of students who know where the LRC is located.

Type of Measure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Assessed using:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Next, Prof. Johns measures how often students use the LRC.

Type of Measure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Assessed using:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Lastly, on a scale of 1-10, Prof. Johns asks the students to rate how positively they feel about their experiences at the LRC.

Type of Measure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Assessed using:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_