Statistics Homework

[Enter name of student here]

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**Answer 21.3**

This pertains to quantitative data because reading scores have been recorded by researcher. A paired sample t-test will be appropriate here because subjects on which experiment is performed remain the same and experiment is performed before and after training.

**Answer 21.4**

Same quantitative data has been used pertaining to reading scores. An independent samples t test will be used by this researcher because students who are assigned to training condition or control condition are not the same.

**Answer 21.7**

This is qualitative data because it is related to creativity and astrological signs which cannot be quantified. A chi square goodness of fit test will be applied with one variable i.e. creativity.

**Answer 21.8**

This data will be considered qualitative because both the sexual codes and behaviors are qualitative variables. A chi squared test will be applied to this situation with two variables.

**Answer 21.12**

This data is qualitative in nature because operating room environment cannot be quantified as well as the state of emergency amputees. Although there are 100 amputees but the variable is dichotomous which shows that it is qualitative in nature. A chi squared test for two variables will be used to analyze the data is this scenario.

**Answer 21.13**

This study is quantitative in nature because the results will be shown in terms of activeness times of rats from different cages. A two way ANOVA test will be implemented in this situation because researcher wants to compare more than two groups and she also wants to see if there different genders react differently to all conditions.

**Answer 21.14**

The study uses quality of speech as a variable which is qualitative in nature because it is not possible to quantify this variable directly. A t test with independent samples is used because the students used for the experiment are not the same.

**Answer 21.15**

The study is qualitative in nature because the variable of depression is not quantifiable because of its nature. This study will use a one sample t-test which will compare sample mean to population mean.

**Answer 21.16**

The study is qualitative in nature because the variable of depression is not quantifiable because of its nature. This study will use the independent sample t-test because there are two distinct samples to be tested separately.

**Answer 21.17**

This study is quantitative in nature because test scores can easily be quantified and analyzed accordingly. One way ANOVA will be used in this scenario because the study only wants to see the differences across groups.

**Answer 21.18**

This study is qualitative in nature because both variables cannot be quantified directly. A chi square for two variables will be used to test the difference between these attributes.

**Answer 21.19**

This study is qualitative because it involves behavioral tests related to chimpanzees. A goodness of fit test for chi square will be applied in this scenario.

**Answer 21.20**

This study is quantitative in nature because the correct predictions made by the participants is a numerical outcome. Single sampled t-test will be applied to this situation because a standard score of 20 is given against which test score will be compared.

**Answer 21.21**

This study is qualitative in nature because both the variables cannot be expressed in exact numbers. A chi squared test for two variables will be used to analyze data in this scenario.