Q-QUIZ APRIL 2019 - ANSWERS

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Calculating statistics based on your measured values, it is reasonable to define first which statistics shall actually be considered in your sample. Defining a measurement scale makes this process easier.

1. The body height is based on a ratio scale. Since it can only assume positive values, it has a natural origin.

2. Temperature in kelvin refers to the ratio scale. Since the Kelvin scale has a unique, non-arbitrary zero point called absolute zero, it is considered to have a natural origin.

3. The grades from A* to G are based on a natural rank order that can be created by applying the criteria "better", "worse" and "equal". This is the reason why they follow an ordinal scale.

4. The date is a typical example of the interval scale since dates do not have a natural origin. which is a characteristic of the interval scale. Additionally, you may measure the distance between two dates in days.

5. The biological sex has different characteristic values, but they do not follow any rank order. This is the reason why the nominal scale applies.

6. The only scale applying to the birthplace is the nominal scale. Even though you are able to distinguish the single characteristic value, they do not follow any rank order. You may only compare birthplaces in terms of "equal" and "unequal".

7. Chicken egg sizes refer to an ordinal scale. The size of eggs allows for a natural rank order. You may sort them by size; you may thus compare these eggs in terms of "less", "equal" and "greater".

8. The temperature in degree Celsius is based on an interval scale since the temperature does not have any natural origin in the form of a limit. However, you are able to measure the distance between two values.

9. The name of a person is an example for a nominal scale; you can admittedly distinguish different names, but names do not follow any natural rank order.

10. The fares in public transportation are based on a ratio scale. You cannot pay less than "nothing" for a trip, so there is a natural origin and you may calculate fare ratios.