

1. Some of the criteria below are used for deciding whether something is alive. Please cross out the five that should NOT be used. 5pts

Requires oxygen for breathing

Can use energy

Attains consciousness

Can maintain a stable internal environment

Can respond to environment

Consumes other living things

Can move

Is composed of a cell or cells

Contains DNA or RNA

Has an organized form

Is large enough to see without specialized instruments

Reproduces through sexual and/or asexual reproduction

2. Your friend is interested in testing whether exposing plants to music will affect their growth. He proposes placing a tomato plant near a radio and counting how many tomatoes are produced.

(a) What critical experimental group is your friend missing? The _____ group.

(b) What type of plant should your friend use for this group?

(c) How should your friend measure this group's growth?

(d) What should be different about this group, compared to the group getting the music?

(e) What does information from this critical group allow your friend to do?