Block: Algae Review Sheet: Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Short answer questions:  
1. How is alternation of generations an effective way of ensuring that fit individuals survive?

**-Alternation of generations is the form of sexual** **reproduction that algae can go through. It is through this process can the algae develop more genetic diversity which ultimately leads to one algae being “more fit” than the others which ensures the organisms survival when confronted with a threat.**

2. Name the two types of asexual reproduction that algae can go through

**-Using asexual spores (seeing as algae is underwater the spores can be released and swim around) and fragmentation.**

3. Why are some unicellular algae classified as plants?

**-Some algae are unicellular which makes them more “Protista” than plantae, however, they typically have cell walls, photosynthesis, and Chloroplasts**

4. How are algae adapted to life in water?

**-They do not need a stem like most land plants do, they simple float around using the currents  
-They do not risk drying out, and thus have no need for thick cell walls or any waterproof structures  
-** **The reproductive cells can simply swim around, using features like flagella  
-Taking advantage of their much thinner cellular structures, algae simply exchange carbon dioxide, oxygen and nutrients with the water all around them.**

The Cellular: Example:  
A) Colony i) Valonia ventricosa

B) Multicellular ii) Volvox

C) Unicellular iii) Giant kelp

D) Filamentous iv) Oedogonium

Sketch out green, red and brown algea:  
**(Just a little drawing exercise)**