I. What is an alga?

A. Any* photoautotroph not in Kingdom Plantae.
   1. Green algae
   2. Red algae
   3. Brown algae & Diatoms
   4. Blue-green algae* (Cyanobacteria)

B. Characteristics of
   • Photosynthetic
   • Aquatic (terrestrial)
   • No cuticle
   • Nonvascular
   • Most lack 2n multicellular form
   • Fertilization (when present) via external water
   • Base of aquatic food chains; 90% of marine and freshwater biomass.

C. Where do you find them?
   Regularly moist areas, fresh or marine
   but most capable of regular, extreme dessication
   (e.g., intertidal zones, N face of houses or trees).
II. Seaweeds
A. Seaweeds are marine, macroscopic algae
B. They come from 3 algal lineages, each distinguished by their accessory pigment profile and thus color (note: all have Chlorophyll a)

<table>
<thead>
<tr>
<th>Group</th>
<th>Color</th>
<th>Accessory Pigments Responsible for their Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Green (like Plants)</td>
<td>Same mix of Carotenoids found in Plants</td>
</tr>
<tr>
<td>Red</td>
<td>Reddish</td>
<td>Phycobilins</td>
</tr>
<tr>
<td>Brown</td>
<td>Brown</td>
<td>Fucoxanthin</td>
</tr>
</tbody>
</table>

C. Morphology of Seaweeds

*Ulva* (sea-lettuce) is an example of a green seaweed
**Chondrus (Irish-moss)** is an example of a red seaweed

![Chondrus](image)

*Photo by Kontos. Major available via CC BY-SA 3.0*

**Sargassum (sargassum)** is an example of a brown seaweed

![Sargassum](image)

**Sargassum (sargassum)** is an example of a brown seaweed

![Sargassum](image)

**Laminaria (kelp)** is an example of a brown seaweed

![Laminaria](image)
*Laminaria* (kelp) is an example of a brown seaweed.