



Artwork © Cushla Dromgool-Regan, 2009

## PRESSING SEAWEED & ARTWORK

### **Aim / Description:**

Discover seaweeds natural beauty by pressing seaweed and creating artwork and seaweed keys.

### **Background:**

As the tide goes out on the rocky shore there is an array of colour. Look closely and notice how each tidal zone has its own colour, depending on the type of seaweed that lives there.

Seaweeds are classified into three groups. These relate to their pigmentation colour:

- red seaweed
- brown seaweed
- green seaweed.

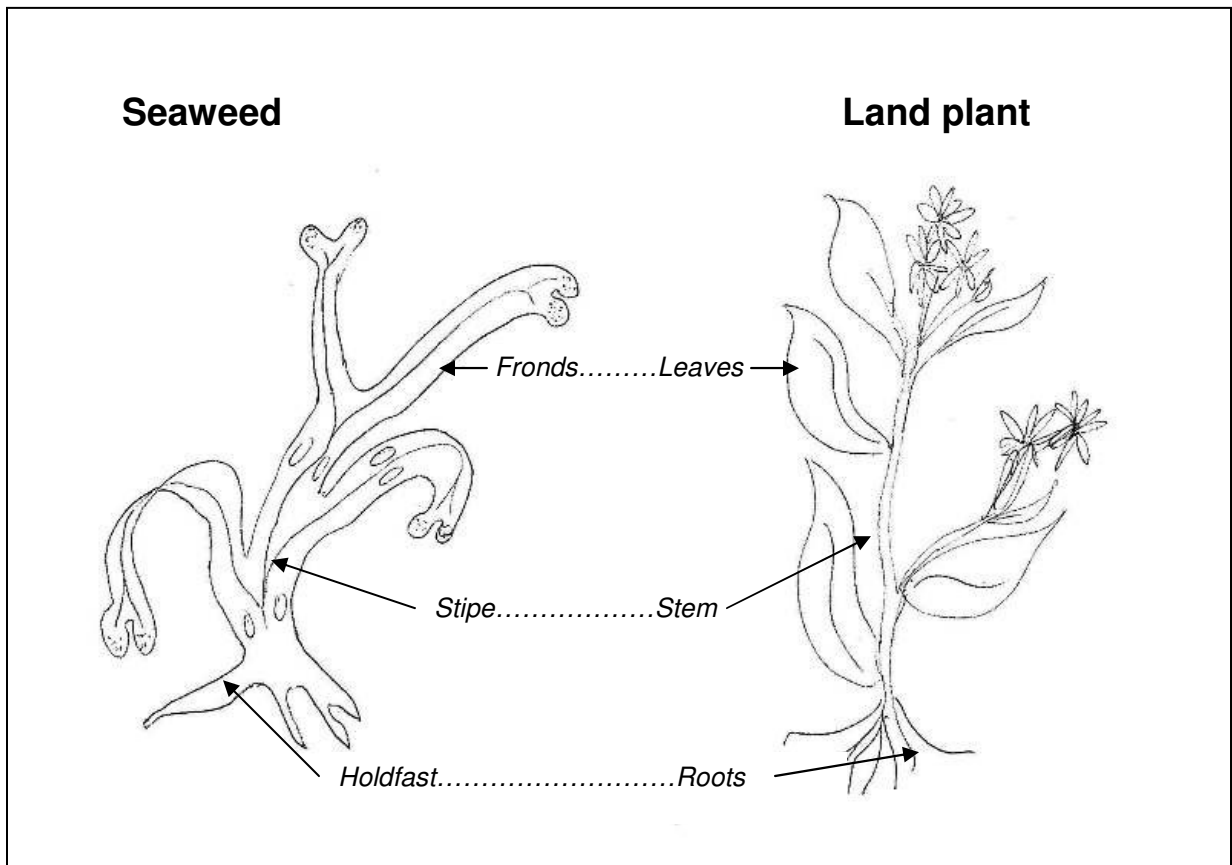
Depending on the season, the amount of sunlight and the age of the seaweed - these colours can vary. For example, brown seaweed can look green and red seaweed can look maroon or dark purple.

Lesson Plan: Pressing Seaweed & Artwork

Seaweed is a form of marine algae and has a vigorous life on the shore where it has to survive in salty water, crashing waves, tides and exposure to the heat and sun. Seaweed provides an important source of food and protection for a wide variety of marine animals as well as generating life and providing oxygen in the water.

Unlike land plants, seaweeds lack roots, leaves, and stems but have other specialised structures. For example:

- Instead of roots that reach down into the ground seaweeds have holdfasts which anchor them firmly to the rocks on which they live.
- Instead of leaves seaweeds have a blade or series of branching fronds growing from the holdfast. Like leaves from seed-producing plants, the blades and fronds are the photosynthesising or food-producing parts of the plant.
- Instead of stems seaweeds have stipes which absorb the shock of the crashing waves and tides. Some seaweeds have air-filled bladders that help their blades rise up towards the surface of the water, where they have a better chance of absorbing the sun's energy.
- Seaweeds also produce a gelatinous substance that minimizes water loss – particularly when the tide is out.





### Lesson Plan: Pressing Seaweed & Artwork

#### Materials:

- Basins
- A4 sheets of paper
- Paint brush
- Pencil
- Coloured cardboard
- String/ribbon
- Hole punch
- Seaweed
- Newspapers
- Nappy liners (if available) / absorbent sheets
- Paint /items for decorating the cover

#### Activity:

Step 1. Discuss the role seaweed plays in the rocky shore ecosystem. Introduce the vocabulary of seaweed - holdfast, stipe, blade / frond compare seaweed with land plants. Investigate the role seaweed plays in the rocky shore ecosystem.

Step 2. Collect a range of seaweeds from the seashore. Try and find seaweeds that show different colours, texture and shapes which are located at the various zones of the seashore.

If you look closely at seaweed you'll not only find an array of colour and some interesting adaptations for coping with waves and tides, but also some beautiful patterns. Enjoy discovering the patterns of marine algae by doing a seaweed print.

Step 3. Divide up the seaweed amongst the students. The class will need to wait up until the seaweed has dried to create seaweed artwork.

The students will be able to use the dried seaweed to make a variety of artwork such as:

- seaweed keys (booklet)
- a seaweed display board (i.e. showing the zones of where the different seaweeds are found on the seashore)
- seaweed cards
- seaweed collages and more.



### Lesson Plan: Pressing Seaweed & Artwork

#### Method:

1. Select a piece of seaweed and wash it in (fresh?) water.
2. Put the seaweed into a basin filled with (fresh?) water. It is a good idea to float the seaweed in the water until it opens up fully.
3. Slip the A4 sheet of paper in the water underneath the seaweed.
4. While still submerged, arrange the seaweed with the paint brush so as all the parts are visible.
5. When you are satisfied with the presentation of the seaweed pull the sheet from the top out of the water, the seaweed should secure itself to the sheet. Seaweed has a natural gelatinous coating that acts like a glue.
6. Tip the paper to drain off the water. Once you lift the paper, make sure you don't disturb the seaweed.
7. Place the wet paper and seaweed on newsprint.
8. Place a sheet of the nappy liners / absorbent paper over the seaweed.
9. Press the plant between newsprint and weigh it down with a heavy object e.g. books. To help the seaweed dry out quickly and prevent it going mouldy, replace the dry newspaper sheets every one to three days.
10. Leave pressing for at least 10 days until the seaweed is dry.
11. When the seaweed is dry, label the page that the seaweed is stuck on with the following information:
  - the date it was collected
  - the location where it was found
  - type of seaweed it is
  - Label the holdfast, blade, and stipe on your seaweed.
12. Compare the differences/similarities with a common land plant.
13. When you have pressed a number of different type of seaweeds, combine the pages to make a book. Place a coloured sheet of paper at the front and the back of the collection. Punch a hole through pile of sheets and tie together with a piece of string/ribbon. The cover can be decorated using a seaweed theme and should include a title, the student's name, class and date the book was produced.