

Big Seaweed Search for schools: What you need and what to prepare for lesson one

1. Equipment for Lesson 1

HO = Handout

Prop/handout/materials needed	For	See Instructions/Handout/website	Lesson Slide
Evaluation flipchart or whiteboard 1	Thoughts and Feelings Mind Map	Teachers Evaluation Mind Map Outline	4
Evaluation flipchart or whiteboard 2	Facts Mind Map	Teachers Evaluation Mind Map Outline	5
Samples of seaweed (several/group) or seaweed snap cards if no samples, white trays, torches, lamps, microscope, magnifying glasses, handouts	Activity 1 See the Weed	<ul style="list-style-type: none"> Teachers Lesson 1 Activity 1 Instructions Activity 1/Seaweed Snap HO 	6/7
Video of kelp forest (optional)	Show importance of seaweed	BBC website	13
3 species of seaweed and 2 samples of each seaweed/group (sample can be 1 blade), trays or buckets (2/group), paper and pencils. Use Seaweed Snap cards if no samples	Activity 2 Guess the Seaweed	<ul style="list-style-type: none"> Teachers Lesson 1 Activity 2 Instructions Activity 2 Pupil HO 	22
Handout of species identification chart	Familiarisation with survey species	<ul style="list-style-type: none"> BSS Schools i-d Handout 	24
Samples of the 7 BSS for schools seaweeds (or as many as you can find) knife, bubbly, egg, curly, groovy, pretty, pink paint – optional as can use the slides if no samples	Familiarisation with species in the practical		25-31
Scoring sheet Handout	Understanding the scoring used	BSS Schools scoring sheet	35
Recording Form Handout	Familiarisation with survey form	BSS Schools recording form HO	37
Limpet shell (optional)	Showing what a limpet looks like		38
A picture/map of the beach you're going to (optional)	Familiarisation with the shore		42
Flipchart 1 Feelings again	Review feelings after lesson 1		45
Rock pool spotter sheets and video from MCS	Optional further activity		49/50

2. Prepare for Lesson 1

Reason/For	Prepare	Slides
Evaluation of learning and developing awareness	Prepare evaluation flipcharts, 1 for feelings and thoughts, one for facts known about seaweed. Use the example outline for a seaweed mind map if you wish	4,5,45
Lesson 1, 2	Collect a range of samples on the shore on your pre-visit. Use drift as much as possible rather than growing seaweed and wash carefully in seawater to remove any animals. Print out snap cards	Throughout
Activity 1	A variety of seaweed samples but any species will do. Try to give each group a variety of colours	6/7
Activity 1	Set up magnifying glasses and lamps/torches or microscopes	6/7
Activity 2	Each group/table in class has 6 samples of seaweed, 2 samples of 3 species that must match. A sample can be 1 blade or frond. They can be any species as long as the table has the same 3 types set out in 2 trays	22
Familiarisation with forms	Print out the BSS Schools i-d Handout and BSS Schools Recording forms and BSS schools scoring sheet (1/group or pair)	24, 35, 37
Species identification	A sample of each of the 7 BSS for schools seaweeds (optional as can use the slides)	25-31

NB for all activities, alternative ideas and options for fresh seaweed samples are provided in the notes for the activity.

Real seaweed is great to have and enhances the experience, but the lesson could be done without it - just be sure to gather some when class is at the shore.



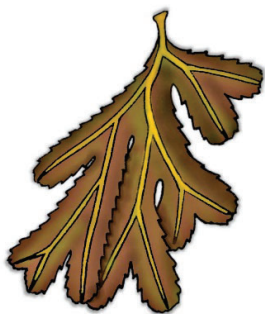
BIG SEAWEED SEARCH

MARINE CONSERVATION SOCIETY

NATURAL HISTORY MUSEUM

2
NORTH DEVON COAST
Areas of Outstanding Natural Beauty

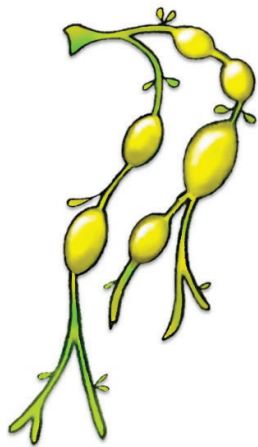
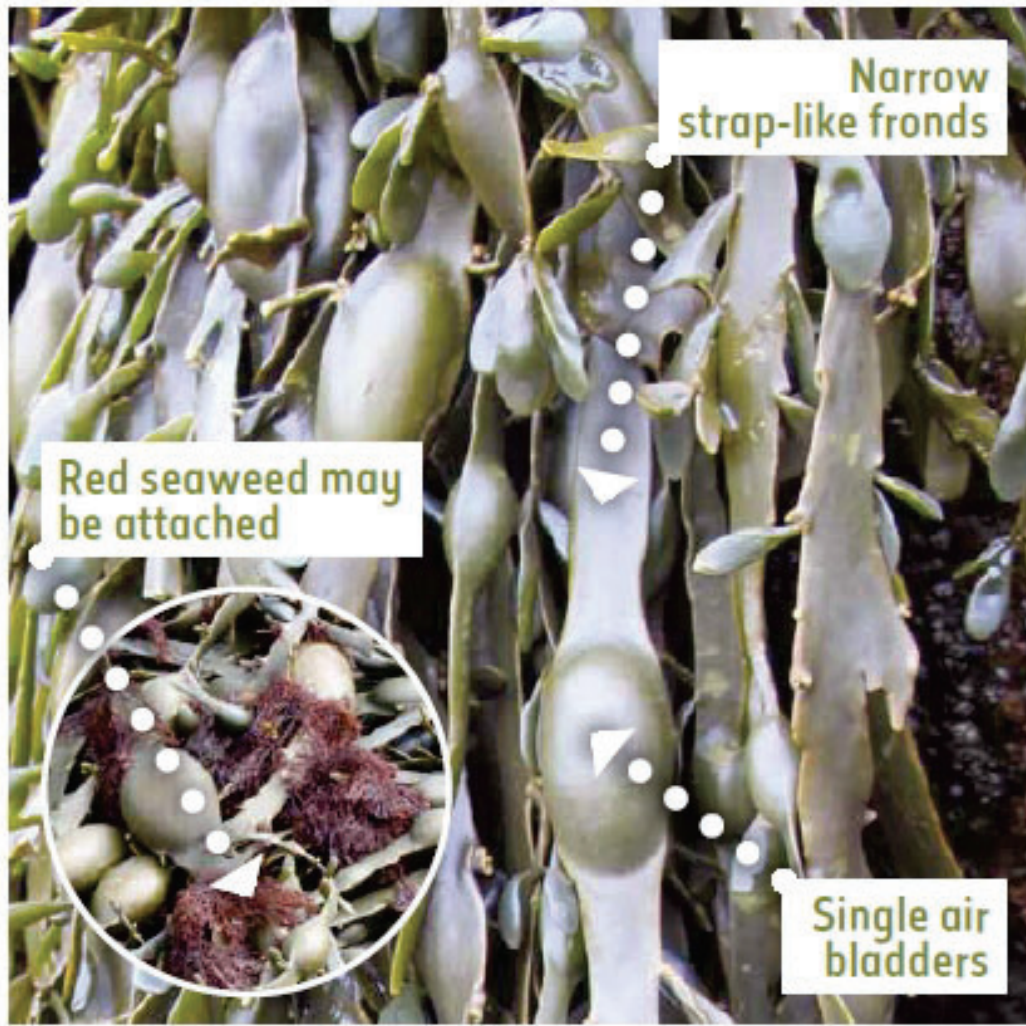
knife



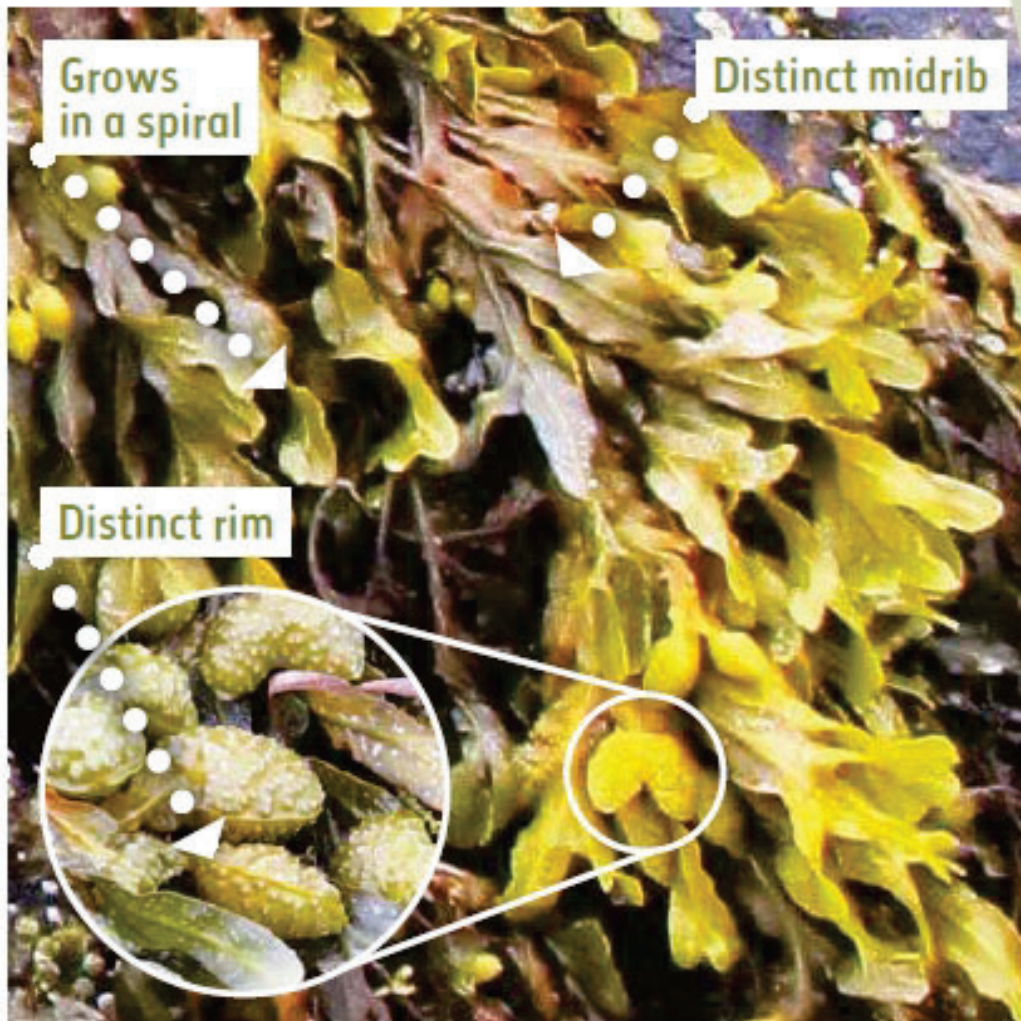
bubbly



egg 0



curly



groovy



pretty



pink paint



Big Seaweed Search for schools – Activity 2: Guess the seaweed

Pupil instructions

You will need for each group:

- Seaweed samples of at least 3 types of seaweed in a tray/bucket (or picture cards of 3 types)
- (or pictures if unable to use real seaweed)
- Paper and pencil

Aim

The aim is to find out which features best describe each seaweed.

How to play

Divide your group into 2 teams

Each team has 3 seaweeds in a tray/bucket. The three types are THE SAME in both teams.

Team 1 = green team – you are describers

Team 2 = red team you are guessers

Teams put your 3 seaweed samples in front of you but don't allow the other team to see.

Team 1 green – secretly agree on a seaweed from your bucket/tray (point to it, don't say it out loud and screen it from the guessers. One of you describes 1 thing about it to the other team. Each person can only say one thing about the seaweed (colour, size, shape, size, smell, feeling). It must be true!

Team 2 red – you get 1 guess after each person in the green team describes one feature. Hold up the seaweed type you think is right.

If you get it wrong, the green team describe one more thing. Make 1 description and 1 guess until someone guesses right

When you have it right, red team write down the description that was most helpful.

Swap teams, team 1 (green) become guessers and Team 2 (red) become describers. Do one other seaweed.

- Which seaweed was easiest to describe?
- Which features helped you to describe it/guess it?

Can you find these seaweeds growing on shore? **How much of each is there?**

Score 3 if all of 1m² **Score 1** if just 1 or 2 plants, **Score 2** if more than 1 or 2 but less than 1m²



knife



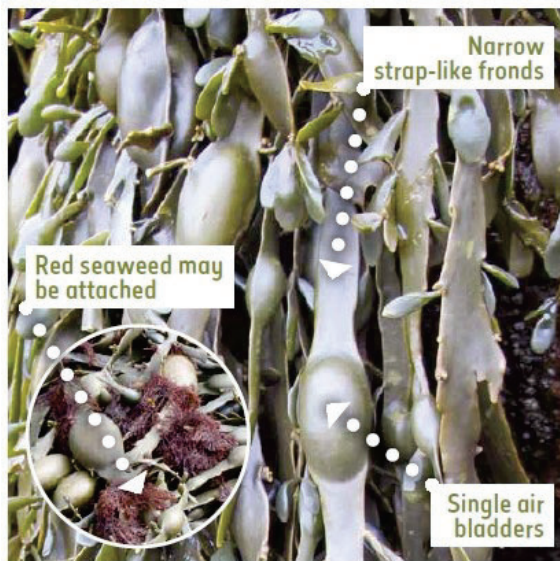
yes/no If yes: Score 1, 2 or 3
serrated wrack (*Fucus serratus*)



bubbly



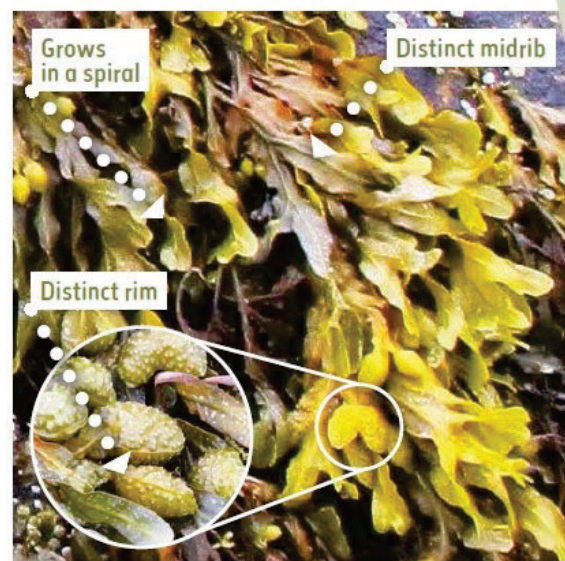
yes/no If yes: Score 1, 2 or 3 bladder
wrack (*Fucus vesiculosus*)



egg



yes/no If yes: Score 1, 2 or 3
knotted wrack (*Ascophyllum nodosum*)



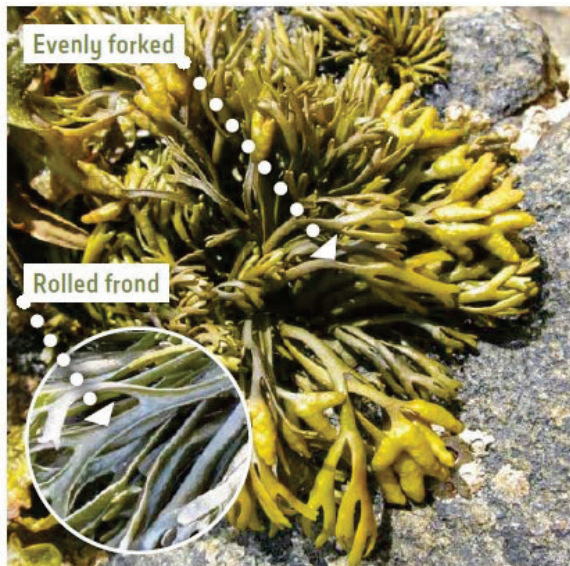
curly



yes/no If yes: Score 1, 2 or 3 spiral
wrack (*Fucus spiralis*)



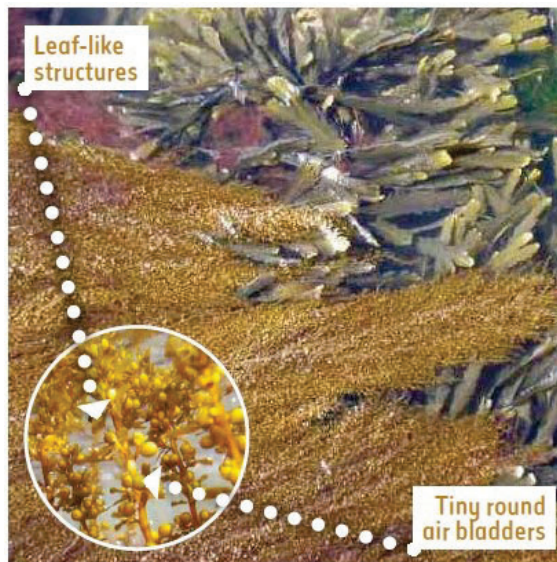
Can you find these seaweeds growing on shore? **How much** of each type? **Score 3** if all of 1m² **Score 1** if just 1 or 2 plants, **Score 2** if more than 1 or 2, but less than 1m²



groovy



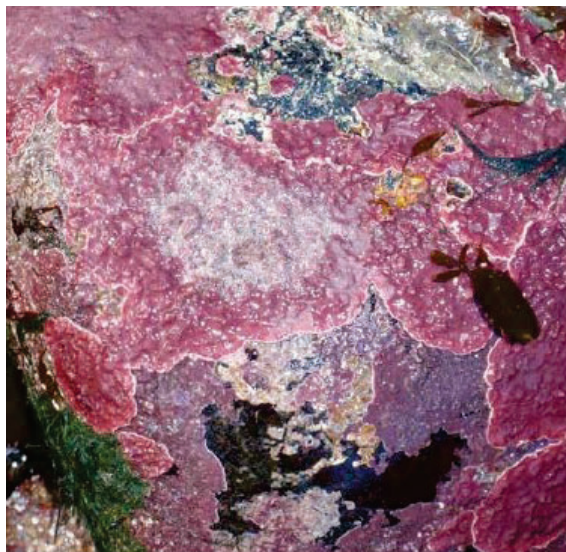
yes/no If yes: Score 1, 2 or 3
channel wrack (*Pelvetia canaliculata*)



pretty



yes/no If yes: Score 1, 2 or 3
wireweed (*Sargassum muticum*) ALIEN



pink paint



Yes/No If yes: Score 1, 2 or 3
calcified crusting seaweed

How many of these seaweeds did you find?

5-7 = Great shore, great job!

3-4 = Good work

1-2 = Try again on another shore!



seaweed!

Seaweeds are vital for marine life and for us. They produce over 70% of oxygen and feed the seas.

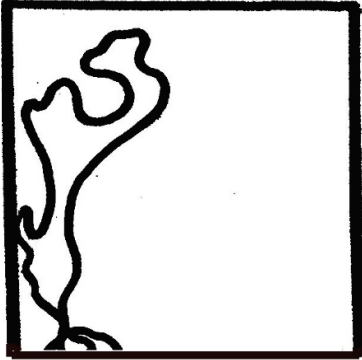
The **Big Seaweed Search** helps us to understand changes in sea temperature, effects of non-native species and the ocean becoming more acidic.

Find out more at

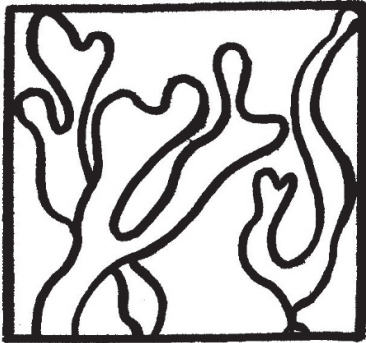
www.bigseaweedsearch.org



Big Seaweed Search for schools - Activity Scoring Sheet



score 1



score 2



score 3



Big Seaweed Search for schools: Shore Recording Form

Your team name:

Start with square 1. Score each seaweed that is growing in the square.

3 if all of 1m² is covered

1 if only 1 or 2 plants

2 if more than 1 or 2 plants, but less than 1m²

Square number	knife 	bubbly 	egg 	curly 	groovy 	pretty 	pink paint 
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Highest score							

Number of squares surveyed:

LIMPET COUNT How many limpets in your 1m square? =

Draw your limpet square. Draw where all limpets and seaweed are (example below)

