
Octopus's Garden

Level

1-3

Key question

What do young children learn on the beach?

Key Outcome

Develop an understanding of the characteristics of beaches, their animals and plants.

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Before starting these beach fun activities with a group of primary school children, divide the group into smaller groups, each in charge of an adult. Make sure safety aspects are understood and that the adults follow the instructions too.

Do an up-front guide to the safety aspects required at the beach, that is, demonstrating wearing hats, sunscreen, sandshoes or sneakers or sandals (not thongs) and drinking lots of freshwater.

Key reminders are:

- no running
- no living animal to be removed or damaged
- turn rocks once – turn twice, so they are back over
- don't touch Coke cans or bottles
- do not touch octopus of any species
- do not touch cones, jellyfish, bristleworms
- beware of things that look like they came from the doctor's office – syringes
- crabs can nip too
- be gentle
- if I fall there is to be NO laughing!

What you need

Set of marine creatures stickers from the Gould League stuck onto cardboard, one for each student

Magnifying glasses or sea-scopes

A hand mirror

Large bag of previously collected treasures or able to receive interesting ones found at the time

Field guides to crabs and shells

Blindfolds

One large hand mirror

What you do

After drawing attention to the hazards, do these activities in any order with a class of young students. These instructions are provided for the teacher.

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1. Mork and Mindy

The teacher stands with or in the middle of a circle of students. Set the scene with an introduction to earth with an orientation from outer space and in relation to other familiar planets. To obtain perspective, invent an outer space alien with a gimmicky name and ask the students to explain to it the things they feel are important about the beach and the sea.

2. Listening Exercise

The waterfront environment offers a wonderful opportunity to acknowledge other senses by removing sight and light. It will provide a mental snapshot to be recalled when triggered at later times. Tie a cloth blindfold over each student's eyes and ask them to listen for a minute or so (time depends on the age of the student).

- What did they hear?
- Are these sounds human made or natural?
- Where are most sounds coming from?

3. Badges and Movement

The Gould League's range of stickers is diverse enough to create a class set of badges. A vignette or cameo description of each creature and their mode of movement provides a springboard into further natural history discoveries at the beach or back at home base.

- Give out a sticker to each student and ask them to tell the group what they know about the animal or plant on the picture.
- Ask others to contribute.
- Back in the classroom, do further research to increase understanding.

4. Shells

A shell hunt is a simple but satisfying exercise for participants. It is safe, secure and familiar but allows for a myriad of other open ended discussions. There should be strong encouragement to limit removal of shell to the best three of the whole group but not taking any is best! Identification is not needed, but a Shell Guide for the area is a useful reference for inquisitive children.

5. Step by Step

By simply calling out what's under your feet as you walk up the beach from the water's edge you enable participants to awaken to the conscious realisation that there are bands of water, debris, sand and finally plants.

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6. Story

Any true story about a marine creature will do but one about a night excursion hunting octopus is a useful link for all of these activities. Hence, the title of this activity. Audience participation enhances the story. The story can be read or memorised by the teacher.

7. Colour Shapes

This is an interesting exercise to raise awareness using visual acuity rather than limiting it. Again it is a doorway to a variety of topics regarding camouflage, danger signal, animal vision, light penetration through water, etc. Use a collection of items from the 'Treasure bag' or items visible on the actual beach such as shells, seaweed, cuttlefish etc. Who can find the oddest shape, or the most colourful thing?

8. Litter survey

Ask the students to look around the beach at the tide mark.

- How common or uncommon is human refuse at your location?
- Discuss the inter-relationship of litter on the beach and pollution in the water.

9. Conservation

This leads naturally on from the last activity. Discuss and review what human activities can help to make your beach better and more interesting both for you and for the plants and animals that live here.

10. Most Dangerous Animal

What or who is it? Place a mirror covertly in front of a few individuals and ask them to tell what they see. Show the mirror to the whole group and ask!

11. Bingo

This is a great opener to discover the local rock platform as well as a discussion on the harshness of the environment there and the human factors that beset it. The teacher or selected students find a natural item and describe it to the class. The rest of the group searches for a duplicate and once found, stands next to it and call out 'bingo'. The class checks that the item does match before repeating activity.

12. Was it always like this?

Provide a very brief description (geography, geology, biology) of the site to add a historical perspective.

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13. Rock pool Discovery

The local beach may be degraded but we can be reasonably sure of finding crabs. Keep in mind the stress tolerance in crabs.

- Divide up a rock platform into different areas for each class group. You then hope to ensure that animals are not handled twice in the same area on the same day.
- Ask students to examine shallow rock pools and under crevices or rocks (remind them to turn the rocks back again, and not to handle blue-ringed octopus).
- Let students carefully scoop up crabs, using home made nets or ice-cream containers. Look at what's been found. The containers can be carefully poured into a larger white tray. A crab guide book can be useful to identify specimens.
- At the end, ask students to carefully return all live animals and plants to their rock crevices or pools. How do they settle back (scamper away, hide, sit there)?

To avoid any allergies, ensure that everyone washes their hands after handling crabs, preferably using freshwater if available.

Conclusion

Allow a little time for reflection by each student, perhaps while they are having a drink. Ensure they leave the beach clean.

Reference

Environmental Starters, Gould League of Victoria.