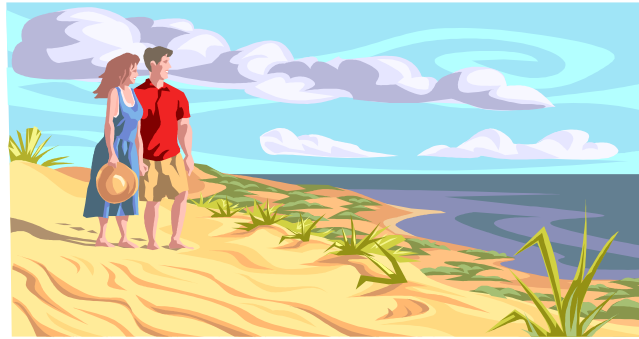


Nevada County 4-H *Marine Biology & Oceanography* Proficiency Program



LEVEL I – EXPLORER

NAME: _____

CLUB: _____

PROJECT: _____

PRIMARY MEMBERS ARE NOT ELIBIGLE TO PARTICIPATE IN PROFICIENCY PROGRAMS.

1. Explain seven beach safety tips and practice them at the beach.

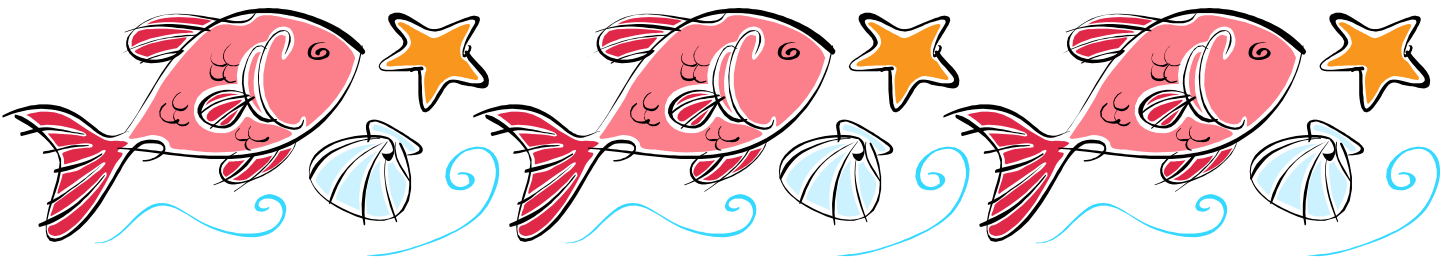
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

2. Identify five species of marine mammals and describe where they can be found.

1. _____
2. _____
3. _____
4. _____
5. _____

3. Describe the marine food web.

4. Identify the parts of a wave and describe how waves affect sea life.



5. Define the following terms.

- phytoplankton _____
- zooplankton _____
- estuary _____
- wetlands _____
- algae _____
- crustacean _____
- invertebrate _____
- mammal _____
- mollusk _____
- ecology _____
- red tide _____
- scavenger _____
- herbarium _____

6. Explain the influence of the moon and the sun on tides.

7. Collect and identify ten seashells and explain how a seashell is formed.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

8. Identify five intertidal animals and three intertidal plants.

- | | |
|----------|----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | |
| 5. _____ | |

9. Describe the regulations which protect marine plants and animals that live in the ocean, intertidal zone, wetlands, estuaries, dunes and marshes.

10. Complete an art project using some aspect of your project such as shell collage, sand painting, beach casting, fish print or rubbing, etc.

Project: _____

Project leader signature

date

11. Identify seven marine birds and describe the differences in their bills, feet and wings. Record when and where each was sighted. Share this information with other members.

	<u>Bird</u>	<u>Bills</u>	<u>Feet</u>	<u>Wings</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____

Project leader signature

date

12. Find six examples of pollution in marine areas. Explain how each could be prevented.

1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

13. Collect samples of and explain the differences between sand particles found on two different beaches.

Beach #1: _____

Beach #2: _____

_____	_____
_____	_____
_____	_____
_____	_____

14. Identify five wildflowers found in sand dunes and five wildflowers found in salt marshes. Record when and where each was sighted. Share this information with other project members. Attach your report.

Project leader signature

date

15. Identify the parts of a fish from a diagram or live example and explain the functions of the fins and the scales.

_____ *Project leader signature* _____ *date*

16. Define hypothermia and demonstrate the H.E.L.P. and Huddle positions.

_____ *Project leader signature* _____ *date*

Congratulations!
You have completed Level I of the
Marine Biology & Oceanography
Proficiency Program.

Name _____ Age _____

Club _____

Project _____

Project Leader's _____
Printed Name Signature

Date _____

County Coordinator's _____
Printed Name Signature

Date _____