



Is Toyama Bay Really Beautiful Or Clean?

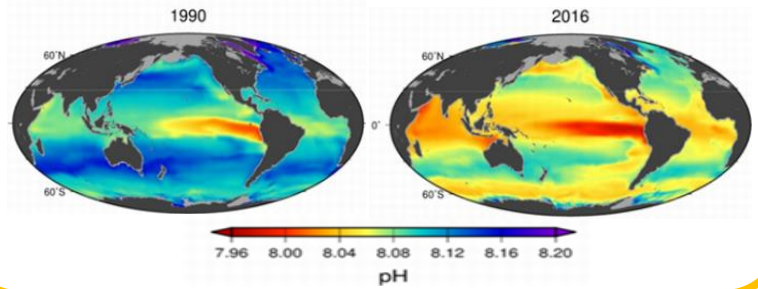
Two problems

Marine Garbage



&

Ocean Acidification



Goals

- Improve student's awareness and their knowledge of marine garbage
- Understand why ocean acidification happens and how we can measure it

Marine garbage

The first questionnaire

Awareness:
Living near the coast



■ high
■ above average
■ below average
■ low

Awareness:
Living inland



Knowledge:
Source of marine
garbage



■ abroad
■ all of Japan
■ Toyama prefecture

Clean up activity



Awareness



Knowledge



The second questionnaire

Which activity was more
impressive to you?



■ 1st questionnaire
■ clean-up activity
■ poster session
■ poster
■ classroom-visit
■ other

Knowledge



Conclusion

- Engage in practical activities
- Reduce the amount of garbage

Take more action! Save our ocean!

Ocean acidification

Mechanisms



Effects

- Harms marine organisms
- Affects the food chain in the ocean

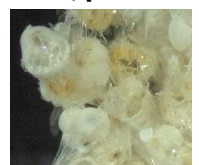
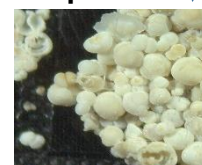
Experiment



pH 8.2

pH 7.6

pH 6.2



Result The lower the pH was,
the more the fossil dissolved.

Various efforts



- Raise awareness of the impact of CO2 on oceans
- Reduce the use of fossil fuels