

How To Get Clear on Water

Grade

10

Topic: Water
Grade: 10
Code: SNC1D
Duration: 2 x 75 minutes

Students will experiment with different ways to purify water.

Curriculum Expectations

- BY.03: Through investigation and applications of basic concepts select and integrate information from various sources, including electronic and print resources, community resources, and personally collected data, to answer the questions chosen

Background Information

Water that is clear is not always clean to drink.

Accountability

Students will need to be aware of where time and money could be saved by creating water-purifying systems to be used in other countries that have water issues. Students will be able to explain the science behind the creation of clean water and understand the process needed to test for clean water.

Teacher Notes

1. Materials: pan, water collector not as high as the edge of the pan, small rocks, plastic wrap big enough to fit over pan, masking tape
2. To create a prototype: Put 5cm of muddy water in the pan.
3. Put pan in a place where the sun shines.
4. Set the glass in the middle of the pan.
5. Stretch the plastic over the pan and secure with tape.
6. Put small rock in the centre of the pan - right over the glass in the middle of the pan. It should make the plastic slope over but not touch the glass. Leave for one day.
7. Test the water collected in the cup for purity.
8. Document the transfer of energy that created the water sample and the purity of the water created.
9. Challenge student to come up with ways to modify this model for use in third world countries.

Home Extension

Research water purification systems on the Internet.

Lesson Comments

What did your students find?

Who did they tell?

What creative designs did they come up with?