

CurriculumVisions Lesson

Students: fill in next to the word answer and return the document for assessment.

Science Book: Dissolving (6C)

Pages 16-23

Everything here is based on our Curriculum Visions book Dissolving (6C)

In this segment, we are going to learn about ways of separating dyes dissolved in water, different ways that crystals are made and how rocks can dissolve.

Part 1

You will need to go to pages 16-17 of the book. Imagine that you have a pen with black ink. Devise an experiment to prove that the black ink is really made up of different colours.

Answers could include.....

An experiment similar to the one on page 17, using filter paper and a dish of water, but using a spot of ink from the black pen only.

If your teachers agrees, try out your experiment.

Part 2

Go to pages 18-19. Why do you think you need to start growing a crystal by using a solution that is so concentrated that no more solid will dissolve in it.

Answers could include.....

Because otherwise the seed crystal will just dissolve in the solution.

Make a plan to grow a sugar crystal. If your teacher agrees, try it out.

Part 3

Go to pages 20-21

Make a plan to remove the salt from seawater. How could you

speed up the process?

Answers could include.....

The plan could include either evaporation or boiling. If evaporation, you can speed up the process by using a larger, shallower dish, by putting the sun in a warm place, by blowing air over the dish, etc. If boiling, the process can be made faster by using less water, a larger container, etc.

Part 4

Go to pages 22-23

What is hard water? How could you test your water at home or at school to see if it is hard?

Answer.....

Water with minerals dissolved in it.

Tests could include looking at the kettle to see if there is fur in it. Boiling water in a pot and checking for a white film.

Other tests you could discuss with students include feeling a film on your hands after washing them. This is caused by the soap reacting with calcium to form soap scum. Spots on glasses and silverware coming out of the dishwasher. Fill an empty soda bottle one-third full, add a few drops of liquid soap and shake vigorously for a few seconds. If there are few or no fluffy bubbles and the water appears cloudy and/or milky, then it is hard.

If you are interested in this topic continue to browse the book and watch our amazing videos. They start right on the book cover.