SCIENCE UNIT: WATER WATCH - LESSON SEQUENCE

CURRUMBIN COMMUNITY FARM CAMPUS

PRE CAMP ACTIVITIES

C2C Sci Yr7 Unit1: Water - waste not want not!

TOPIC: WATER

Exploring water as a resource (1 of 4)

- Demonstrate the amount of fresh water on Earth
- Discuss the importance of water
- · Create a water use chart

Discovering the water cycle (2 of 4)

- · Review the water cycle
- Perform water cycle experiments

Exploring the water cycle (3 of 4)

- Investigate human elements of the water cycle
- Introduce phase changes in the water cycle
- Perform a water cycle activity
- · Identify water as a renewable resource
- Define aquifers

Evaluating water quality (4 of 4)

☑ Lesson 4 to be completed during camp learning experiences

TOPIC: MIXTURES

- Investigating mixtures (1 of 2)
- Exploring chromatography (2 of 2)

TOPIC: SEPARATION

- Exploring separation techniques (1 of 4)
- Revising separation techniques (2 of 4)
- Assessment: Separating a mixture (3 of 4)
- Assessment: Separating a mixture (4 of 4)

RESIDENTIAL CAMP PROGRAM Australian Curriculum



Water Quality Testing

• Perform water quality tests of Currumbin Creek: Acidity (pH), water colour, odour & turbidity

Defining a Catchment

- Investigate farm model to discuss the definition of a catchment.
- Demonstrate a local river story "Currumbin Valley Water Drop"

Water Filtration

- Review filtration in water treatment
- Demonstrate a water filter
- · Design and build a water filter
- Perform water filtering challenge

Water Quality Testing

- · Identify the relationship between humans and water quality
- Explore the local creek using nets and collecting trays to catch live bugs (macro invertebrate)
- Implement dichotomous keys to identify the collected species and assess the creeks water quality

Indigenous Water Connection

 Compare indigenous water values and sustainable techniques of locating and consuming water

POST CAMP ACTIVITIES

C2C Sci Yr7 Unit2: Water - waste not want not!

TOPIC: WATER TREATMENT

Reviewing separation techniques (1 of 3)

☑ Lesson 1 to be completed during camp learning experiences

Identifying water treatment processes (2 of 3)

- Review water quality tests
- Explore the movement of water through a treatment plant
- · Identify water quality tests and treatment options
- Compare treatment processes to separation techniques

Comparing artificial and natural processes (3 of 3)

- Compare water treatment processes to the natural water cycle
- Compare available water with water requirements
- Discuss the need for additional treatment processes

TOPIC: WATER USAGE

Evaluating access to water (1 of 3)

- Identify water quality standards
- Summarise collected water-use data
- Compare access to water in different countries

Exploring water usage (2 of 3)

- Complete a water-use survey
- Compare average water usage to Australian other countries
- Create graphs to display data

Evaluating water usage (3 of 3)

- · Compare water costs of different products
- Evaluate the real cost in water of our lifestyle
- Present plans to change habits and reduce water

ASSESSING STUDENT LEARNING – TOPIC: WATER USE

Scaffolding a persuasive argument (1 of 4)

• Research, plan and construct a persuasive argument on a water issue.

Persuasive Argument - Water issue (2-4 of 4)

• Research, plan and construct a persuasive argument on a water issue.