

River Detectives at a Distance

Theme for May 2020: Salinity

Objective: To understand how salinity occurs, what impact it has and what we can do to help prevent it.

Be guided by your teacher on which activities you should choose.



Begin by doing one of the activities in **GREEN** first to understand what salinity is.

Ways to be Smart	Knowing	Understanding	Applying	Analysing	Creating	Evaluating
 Word Smart I learn best by reading, writing & speaking	Read the salinity fact sheet alone or with an adult to learn what salinity is, how it happens, why it's such a big deal and how we can help.	 Can you list an aquatic animal or plant for each letter of the alphabet that would be impacted by high salinity?	 Complete a Salinity Crossword to show your application of the knowledge you have gained about salinity.	Salinity can also be called Electrical Conductivity. Research the meaning of this term and why it is associated with salinity.	Watch a video about desalination , complete the Dazzling Desalination science experiment and write a report about your findings.	Write a speech to inspire others about all the positive ways we can change land practises to ensure we prevent salinity for a better future.
 Number Smart I learn best by working with numbers/science	Read the salinity scale and think about how your life / community would be affected if salinity sat consistently at 2500, 8000 or 12000 $\mu\text{s}/\text{cm}$. . .	 Salinity is measured in micro-Siemens per centimetre ($\mu\text{s}/\text{cm}$). List units for as many other types of measurements as you can.	Create a timeline showing how salinity has occurred. You could show causes and impacts of salinity and project into the future with salinity cures.	Investigate EC levels in a waterway near you by exploring the state . Filter for your CMA region and the EC parameter. Compare to the Water Quality Ratings for your region.	Study EC readings from your school's test site or a waterway near you. Choose a selection and create a graph to show a visual snapshot of results.	 Complete some or all of these science experiments; Salt On The Rise , or Salinity Mini Tasks . Record and evaluate your findings.
 Picture Smart I learn best by drawing and visualising	Watch Fresh and Salty to learn what salinity is, how it happens, why it's such a big deal and how we can help. If you're aged 12+ watch the video Soil Salinity In Australia	Complete the Spot The Difference activities to identify the positive and negative actions the school and house are taking and their impact on salinity.	 Draw a flow chart or cross-section of a piece of land illustrating the steps in the salinity process to show how rainfall can raise water tables.	 Draw a comic strip to show how you would feel if you were a tree living beside a salty waterway or a fish living in a salty waterway.	Complete the Change Your Perspective activity to create a dazzling optical illusion that illustrates what you know about salinity. Print photos or draw your own pictures.	Create a diorama in a shoebox showing two contrasting scenes - an environment ravaged by salt and a well-managed healthy environment.
 Body Smart I learn best by being active and hands on	 Our bodies need salt but too much is not a good thing. Complete the activity Salt At The Supermarket using foods from your pantry.	 Complete the Taste testing activity to compare and order salt solutions. How sensitive are your taste buds?	Use everyday items to model the salinity process. You could use a water can for rain, a sponge in a sieve for the soil, a tub underneath for the rising water table, etc.	Complete Activity A from Dramatic Salinity Scenes to dramatise a variety of scenarios. Do this with others or set it to music for greater impact.	 Research to find the name of an indigenous (local) tree or shrub and plant one to help lower the water table.	Make Salt Ceramic and use it to make a model of a creature/s that rely on good water quality. Use your models to tell a story about salinity.
 Music Smart I learn best by making and listening to music	Watch the Three Rivers Flow video to see how important the Murray, Campaspe and Goulburn Rivers are to Yorta Yorta children.	After watching Three Rivers Flow write down some of the lyrics that you love the most, the images that are most powerful or the instruments that evoke the most emotion.	 Complete the Salty Scales activity to make your own musical scale. Compose a piece to accompany photos .	Write a Diamante Poem to make Poetry With Pizzazz contrasting two opposing nouns. Bring the transition to life by dramatising the nouns, verbs and adjectives.	 After watching Three Rivers Flow can you create a rap about your own waterway and what it means to you?	 Look at photos of healthy and salt-ravaged environments and choose contrasting pieces of music to represent them.
 People Smart I learn best by working with others	Explain to someone else what you understand about salinity; how it occurs, where it comes from, what impact it has and what we can do to help.	 With your family play Saltwatch Sports . Set out all the activities and complete a round robin tournament.	With others, role play how salinity happens. Roles could include rain, the water table, trees, creatures living in a waterway, a farmer, etc. Film your dramatisation.	Watch an inspiring video about WA farmers reclaiming their salty farm land using local native plants. Write interview questions that you would like to ask them.	Contact your local Landcare /Friends Of/Community Group to ask if you/your school could get involved in a tree planting event this year.	Work with others to Debate a Dilemma about a salinity problem in your town. Try different roles and argue your point to convince others.
 Self Smart I learn best by myself	Use the Salinity And Me worksheet to write words/phrases or draw pictures to reflect on salinity at the start of your learning.	Watch one of the videos about the role of waterways in traditional life. Reflect on how Aboriginal people carefully manage land to avoid salinity.	Record a video diary to describe how you would feel as a tree living beside a salty waterway, a fish living in a salty waterway or a farmer losing his/her farm to salinity.	 Complete the Crystal Creations or Surviving in Saltwater science experiment and keep a journal to record your findings.	Draw or write what your local environment might look, feel and sound like in the future if poor land practises accelerate salinity, or if new approaches prevent salinity.	Read the article from WA or the ABC article and then reflect on one or both by completing a PMI where you list the pluses, minuses and interesting points.

Please adhere to all current COVID-19 advice to safeguard your health.

Send your efforts to your teacher and it may be shared in the school newsletter or on the Billabong Banter tab of www.riverdetectives.net.au. Make sure you have permission from parents first.