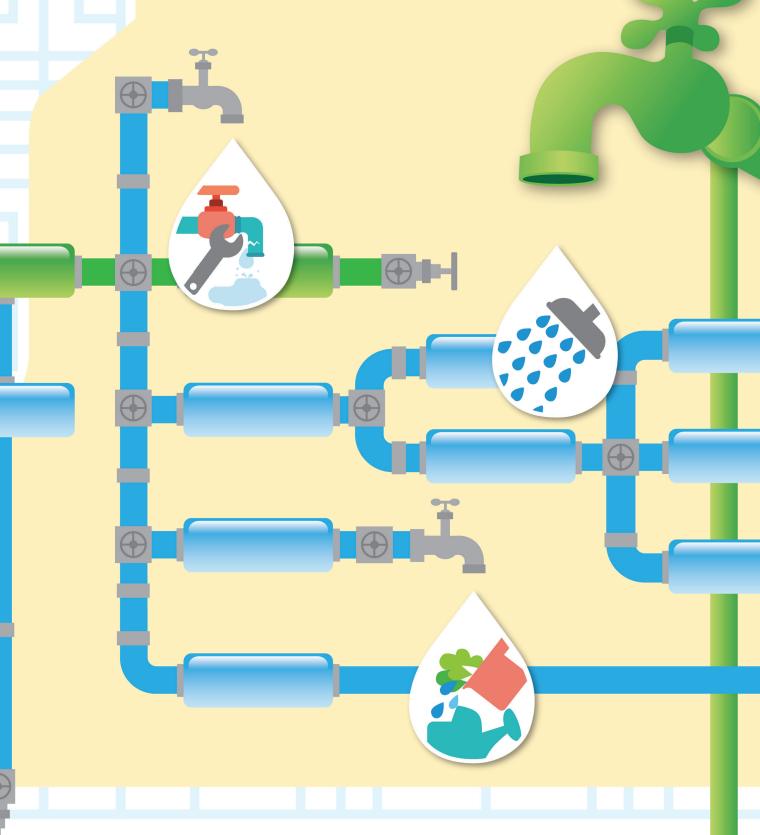
"Cherish Water Campus"
Integrated Education Programme
Kindergarten











Water Supplies Department (WSD) launched the "Cherish Water Campus" Integrated Education Programme - Kindergarten with the aim of cultivating water-saving habits and nurturing a water conservation culture among the younger generation. The teaching kit provided for kindergartens includes the storybook "The Adventure of Water Save Dave and the Kingdom of Cando", the Activity Book and the Teacher Resource Book. The storybook follows WSD's mascot Water Save Dave's adventure in the Kingdom of Cando.

The activities in the Activity Book complement the storybook "The Adventure of Water Save Dave and the Kingdom of Cando", further educating children with different types of activity to consolidate their concepts related to "Cherish Water" and "Understand Water". The activities promote water conservation and enhance children's knowledge about water resources according to the learning progress and objectives of the children aged between five and six based on the six Learning Areas of the "Kindergarten Education Curriculum Guide" (2017):

- Language
- Nature and Living
- Arts and Creativity
- Physical Fitness and Health
- Early Childhood Mathematics
- Self and Society

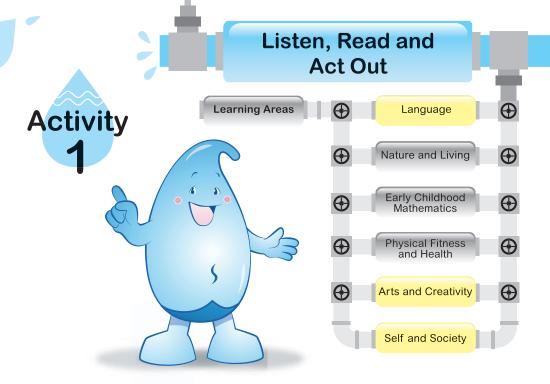
After telling the story, teachers can enhance children's understanding of water and cultivate water-saving habits among them by organizing appropriate activities with reference to the Activity Book. Teachers can adjust the activities according to their curriculum and actual classroom environment, or even innovate and develop other activities related to "Cherish Water" and "Understand Water".





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- After telling the story of "The Adventure of Water Save Dave and the Kingdom of Cando", teachers guide the children to read it aloud.
- Guide the children to present the story in the form of drama as an extended activity.
- Help children better understand the story, improve their vocabulary and develop an interest in reading by listening, reading aloud and acting.
- Encourage parents to read the storybook with their children and spread the water-saving messages.

Resources

- "The Adventure of Water Save Dave and the Kingdom of Cando"
- Water Save Dave and Animal Paper Crowns (from the DVD)
- Water Save Dave Paper Bag Puppet (from the DVD)
- Pieces of single-sided paper, cardboard paper strips and rubber bands
- Paper bags

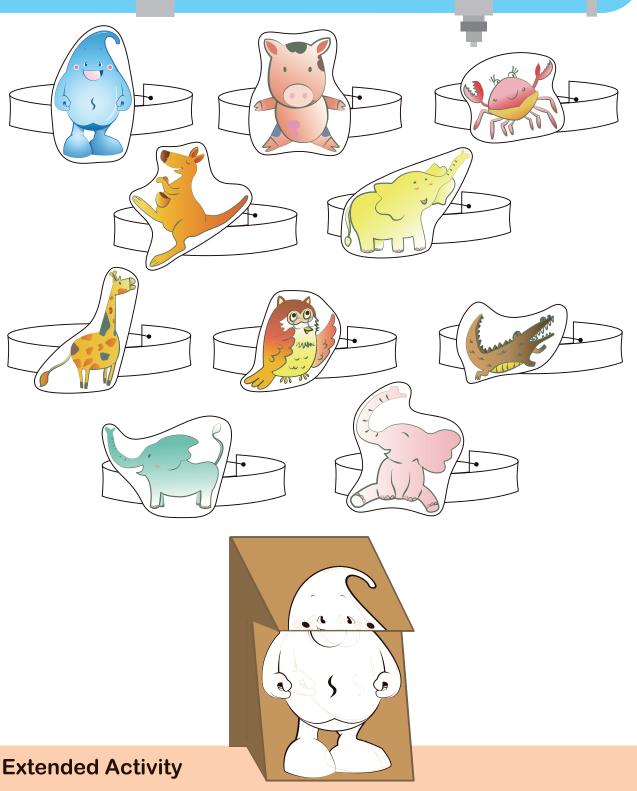
Suggested Procedures

Listening to the Story

- 1. Arouse children's curiosity by asking them questions about Water Save Dave.
- 2. Invite children to point out the causes of water wastage to stimulate thinking and discussion.
- 3. Relate the story to daily lives.

Reading the Story

- 1. Read the story aloud with the children.
- 2. Emphasize proper water use.
- 3. Guide the children to read aloud selected scenes.

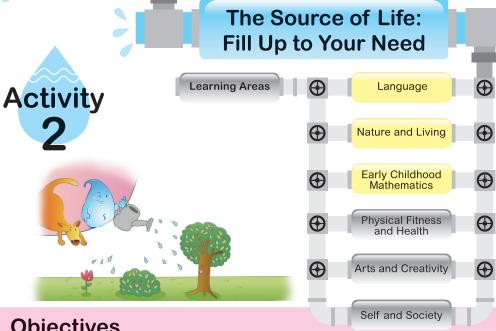


Acting the Story Out

- 1. Enhance children's memory of the story and improve their communication skills through performance.
- 2. Create Water Save Dave and Animal Paper Crowns and Water Save Dave Paper Bag Puppet with the image files from the DVD.
- 3. Teachers can make their own props for the play according to the needs.

Sharing the Story

Parents are encouraged to read the story with children and share water conservation messages.



- Teach children through questions and discussion that water is precious and indispensable, which is shared among all living things on the Earth.
- Cherish water and use only when needed.

Resources

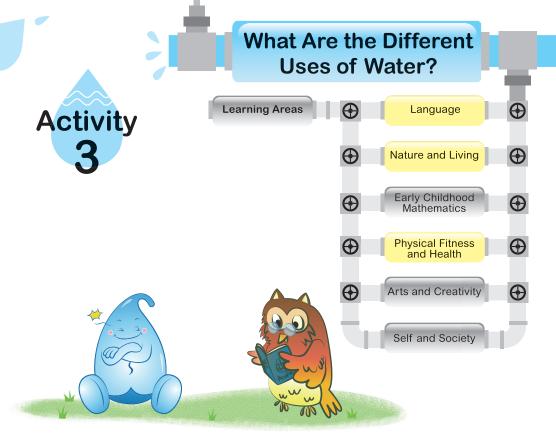
- "The Adventure of Water Save Dave and the Kingdom of Cando"
- Photos of "Healthy Plant" and "Wilting Plant" (from the DVD)
- Video showing the droughts in remote mountainous areas https://www.youtube.com/watch?v=kfB-XtElGtg
- Transparent water bottle
- Cups
- Water

- 1. Show the photos of "Healthy Plant" and "Wilting Plant" (from the DVD) to children, ask them to observe and compare the two photos.
- 2. Guide the children to think about the causes of the plant's wilting. Encourage them to answer the question using conjunctions of cause such as "because", "since", "as" and "so".
- 3. Ask the children to imitate wilting plants (unhappy with heads down) and plants with sufficient water (energetic and happy).
- 4. Read pages 30 to 31 of the storybook with the children. Ask them to imagine a world without water to highlight the importance of water to maintain all life on the Earth.
- 5. Discuss the followings with the children:
 - Reasons for conserving water
 - Impacts of water wastage
 - Ways to conserve water
- 6. Remind the children to finish all the water in their cups without wasting a single drop of it. Teachers are suggested to check the children's water bottles after class and remind them of the importance of water conservation.



Sharing Water Resources

- 1. Display the video showing the droughts in remote mountainous areas to bring out the idea that water is a limited resource.
- 2. Pour water from a larger cup into two smaller cups. (One of the smaller cups is fully filled with water, while the other is filled with little water only.)
 - ♦ Water resources are akin to the larger cup of water which is shared among humans, animals and plants. If the children use too much water (the full cup of water), other people, animals and plants will not have sufficient water (the cup with little water). Teachers can use other objects to replace water.
- 3. Remind children to avoid wasting water in their daily lives.
- 4. Teachers are recommended to let children fill their own cups during the snack sessions and remind them to fill up to their needs.



- Teach children different uses of water through questioning.
- Teach children about water-related activities and utensils and match them accordingly.

Resources

"Uses of Water" and "Utensils" flash cards (from the DVD)

Suggested Procedures

- 1. Invite children to list different uses of water.
- 2. Make flash cards with the files from the DVD.
- 3. Ask the children to match the uses of water with suitable utensils:

Uses of Water	Utensils		
Drinking	Glass		
Taking a Shower	Showerhead		
Cleaning	Cleaning Cloth		
Cooking	Pot		
Brushing Teeth	Toothbrush		
Watering Plants	Watering Can		

4. Explain the uses of water.













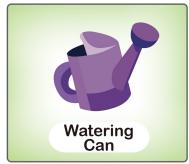












Guess the Action

Split the class into groups and ask one group to imitate the action of water use (drinking, taking a shower, cleaning, cooking, brushing teeth and watering plants) and the rest to guess.



Saving Water: Dos and Don'ts

Language

Nature and Living

Early Childhood
Mathematics

Physical Fitness and Health

Arts and Creativity

Self and Society

Objectives

• Identify places with access to freshwater at school.

Learning Areas

- Distinguish between water-saving habits and water-wasting habits.
- Learn to give simple clean-up with water.

 Develop cooperation and responsibility in children by asking them to clean the classroom in groups.

Resources

- Photos of places with access to freshwater at school
- "Water-Saving Habits" flash cards (from the DVD)
- A whiteboard

A box

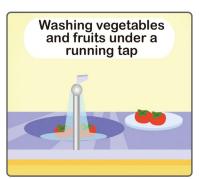
Water

Cleaning cloth

- 1. Show children to places with access to freshwater at school (bathroom and playground) or show them photos of those places.
- 2. Children list the uses of water.
- 3. Show the flash cards to the children and then put the cards into the "mystery box".
- 4. Invite children to draw a card from the box at random and identify whether the action shown saves water or wastes water. Put the cards on the whiteboard.
- 5. Bring out the message that water can be used for cleaning but we have to use wisely because it is very precious.

Wasting Water	Saving Water
Leaving the tap running while brushing teeth	Turning off the tap and using a cup filled with water while brushing teeth
Washing vegetables and fruits under a running tap	Washing vegetables and fruits in a container filled with water
Leaving the tap running while soaping hands	Turning off the tap while soaping hands
Taking a bath	Taking a shorter shower
Washing only one item in the washing machine	Running the washing machine with a full load
Playing with water while washing hands	Watering plants with the same water used for washing vegetables and fruits



















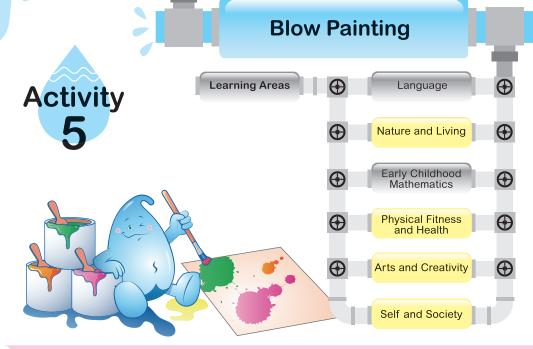






Cleaning Starts with You and Me

Ask children to clean the classroom with damp towels in groups.



- Allow children to observe the properties of water: fluidity, odourlessness and colourlessness.
- Foster creativity and aesthetics in children.

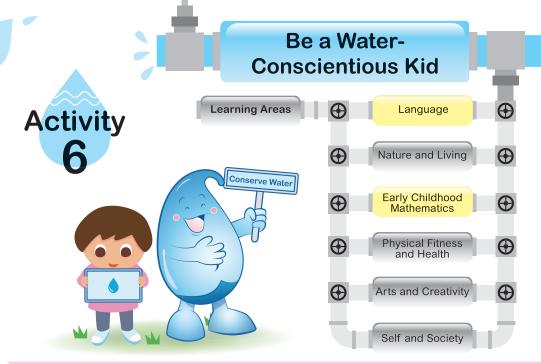
Resources

- Water
- Cups
- Cotton wool
- Plastic bowls or plates
- Pieces of single-sided paper or blank drawing paper
- Different colours of watercolour paint
- Straws

- 1. Read the scene that Water Save Dave flows to other places through a river on pages 34 to 35 of the storybook with the children.
- 2. Show the children a cup of water and ask them to observe it, smell it and touch it.
- 3. Distribute a cup of water and some cotton wool to each group of children. Ask the children to wet the cotton wool with water first and then drop some water on a plastic bowl or plate with the cotton wool.
- 4. Invite the children to describe the water droplets and explain that water is a fluid without a fixed shape.
- 5. Distribute pieces of single-sided paper or blank drawing paper to the children and ask them to mix some water with watercolour paint.
- 6. Help the children dip a straw in the coloured water and use a straw to blow coloured water around on the drawing paper, creating different designs.



Move the paper and roll the paint over it to emphasize the fluidity of water.



- Understand the water consumption habits of children.
- Learn different ways of saving water.
- Spread the water-saving messages to family, and set water-saving target.

Resources

- A whiteboard
- Pens
- Pictures for the Survey (from the DVD)
- Pieces of cardboard
- "Commitment Certificate" (from the DVD)
- Photos of children

- 1. Read the scenes that the animals do not conserve water on pages 14 to 29 of the storybook:
 - Miss Piggy takes a bath in a big barrel.
 - Mr. Crocodile brushes his teeth while leaving the tap running.
 - The three elephants blow water at one another.
- 2. Show the children "Pictures for the Survey" (from the DVD) and learn about their water consumption habits.
- 3. Present the results of the survey. Teachers are suggested to discuss watersaving and water-wasting habits with the children and bring out proper ways of water use. After that, teachers should set water conservation targets with the children.
- 4. Write down the targets on the cardboard and ask the children to report to their family.
- 5. Teachers are suggested to conduct a survey again a week later to check if the children have put water conservation into practice.











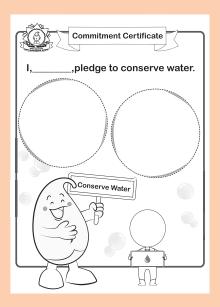


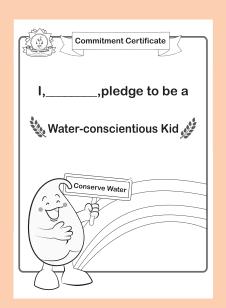


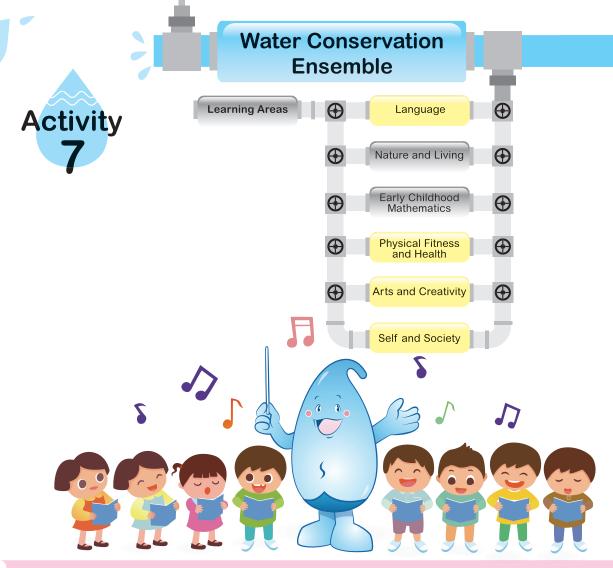


Pledge to Be a Water-Conscientious Kid

- 1. Help children to fill in the "Commitment Certificate" (from the DVD) and draw pictures on the topic of water conservation.
- 2. Ask the children to fill in the sentence "I, _____, pledge to be a Water-Conscientious Kid" and paint on another "Commitment Certificate" (from the DVD).







- Cultivate the virtue of water conservation among children through "It's a Small World" (Water Conservation Version) and 《知水・惜水・由你開始》.
- Improve children's rhythm and body coordination with different musical instruments and movements.

Resources

- Instrumental music of "It's a Small World"
- ▲ Lyrics and Movement Notation of "It's a Small World Water Conservation Version" (from the DVD)
- Music video of 《知水・惜水・由你開始》https://youtu.be/tNmC3JRoYSM
- ▲ Lyrics and Movement Notation of《知水・惜水・由你開始》(from the DVD)
- Musical instruments (e.g. sleigh bells, tambourines, triangles and maracas)
- Cups with water and chopsticks

Suggested Procedures

Lead the children in singing "It's a Small World" (Water Conservation Version) and making different movements to the rhythm. (Please refer to the movement notation from the DVD)



Lyrics and Movement Notation of "It's a Small World" (Water Conservation Version)

Lyrics :	Water is for	everyone
Movement :	Clap Clap	Swing Swing
Lyrics :	Fixing dripping	water tap
Movement :	Rain Rain	OK OK
Lyrics :	Filling up to	your need
Movement :	Step Step	Point Point
Lyrics : Movement :	We have to Good	conserve it OK OK OK

Movement Notation

Clap : Clapping

Step: Marking time, starting with right leg **Swing**: Swinging your body left and right

Rain : Both palms facing in, simulating rain falling with fingers

Point: Right index finger pointing to the front

Good: Right thumb up

OK: Right hand giving the OK sign

d & Single

Water Conservation Ensemble





《知水·惜水·由你開始》

- 1. Play the music video of 《知水·惜水·由你開始》 and direct children's attention to the messages of water conservation.
- 2. Lead the children in reading the chorus of the song (from the DVD) aloud and explain the message:

如你願意日日節省十公升,

拯救地球齊來同心去響應。

莫待天然之水,

無謂等耗盡了得兩行眼淚。

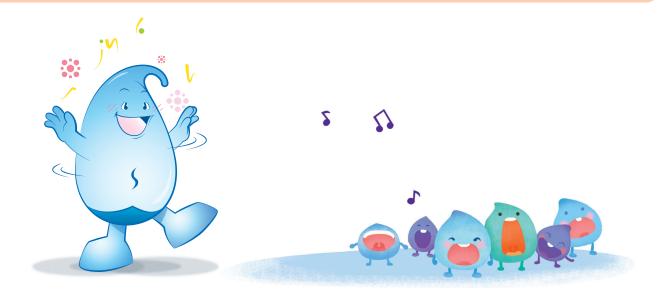
如你願意沐浴最多四分鐘,

舒適之際,無忘食水最矜貴。

循環用水能延續嗎?

如果你願意可以從家開始。

- 3. Help the children find the beat of the song first and try to accompany the song with different musical instruments (e.g. sleigh bells, tambourines, triangles and maracas) or hit the water-filled glasses with chopsticks.
- 4. Teach the children to make gestures with the music according to movement notation from the DVD.





Lyrics and Movement Notation of the chorus of 《知水・惜水・由你開始》 (Chinese Only)

Lyrics :	如你 願意 日日節省 十公 升 ,
Movement :	Point Point Point Ten*4
Lyrics :	拯救 地球 齊來同心 去響 應。
Movement :	Swing Swing Swing Good*4
Lyrics :	莫 待 天然 之 水 ,
Movement :	No No No No Rain*3
Lyrics :	無謂等 耗盡了得兩行 眼 淚 。
Movement :	None None None Cry*4
Lyrics : Movement :	如你 願意 沐浴最多 四分 鐘, Wash Wash Four*4
Lyrics : Movement :	舒適 之際,無忘食水 最矜 貴, Swing Swing Swing Step*4
Lyrics :	

Movement Notation

Clap : Clapping

Point: Right index finger pointing to the front

Ten: Raising ten fingers

Swing: Swinging your body left and right

Good: Right thumb up

No : Right hand giving the NO sign

Rain : Both palms facing in, simulating rain falling with fingers

None: Opening both palms on the side

Cry: Both fists next to your eyes to imitate crying

Wash: Right fist on upper right and left fist at bottom left to imitate back rubbing

Four : Raising four right fingers

Step : Marking time, starting with right leg

Circle: Left hand on waist, drawing a big circle (clockwise) with right index finger

OK : Right hand giving the OK sign



- Enable children to understand the daily water consumption patterns of their families and ways to save water at home.
- Encourage children and their parents to put water conservation into practice through parent-child activities.

Resources

- Assessment Form (from the DVD)
- My Little Handbook of Water Conservation (from the DVD)

Suggested Procedures

1. Ask the children to observe and record the water consumption habits of one of their family members on the "Assessment Form" (from the DVD).

2. Invite the children to present the results and share the ways to save water of

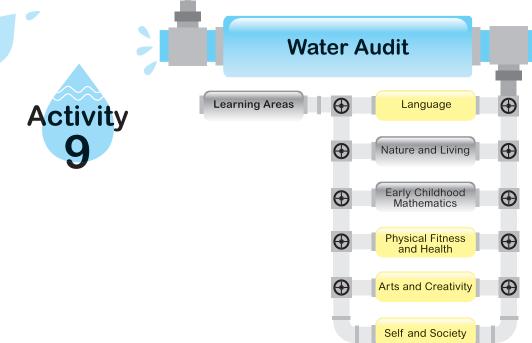
their families.

	1	1		1	1		
Family Member:	First Day	Second Day	Third Day	Fourth Day	Fifth Day	Sixth Day	Seventh Day
Taking a shower for not longer than 5 minutes.	○○	○ ○ ○	⊙ ⊗	○○○	○○○	○ ○ ○	○○○
Turning off the tap while brushing teeth.	⊙	○○○	⊙ ⊗	○ ○ ○	⊙ ⊗	© ⊗	⊙ ⊗
Turning off the tap while soaping hands.	⊙	○○○	○○○	○○○	○○○	© ⊗	⊙
Running washing machine with a full load.	⊙	○ ○ ○	⊙ ⊗	○ ○ ○	⊕ ⊗	© ⊗	⊙ ⊗
Watering plants with the same water used for washing rice or vegetables.	⊙	⊙	○○○	○○○	○○○	⊕ ⊗	⊕ ⊗
Washing vegetables and fruits in a container filled with water instead of washing them under a running tap.	○○○	⊙	○ ○	⊙	⊙ ⊗	⊕	© ©
Washing dishes in a container filled with water instead of washing them under a running tap.	○	⊕	○	⊕	⊕	⊙	⊕
Number of 😈							
Number of 🔀							



Sharing Water Conservation Drawings

Ask the children to draw on "My Little Handbook of Water Conservation" (from the DVD) and create their own handbooks which can be given to their family members to remind them of the importance of water conservation.



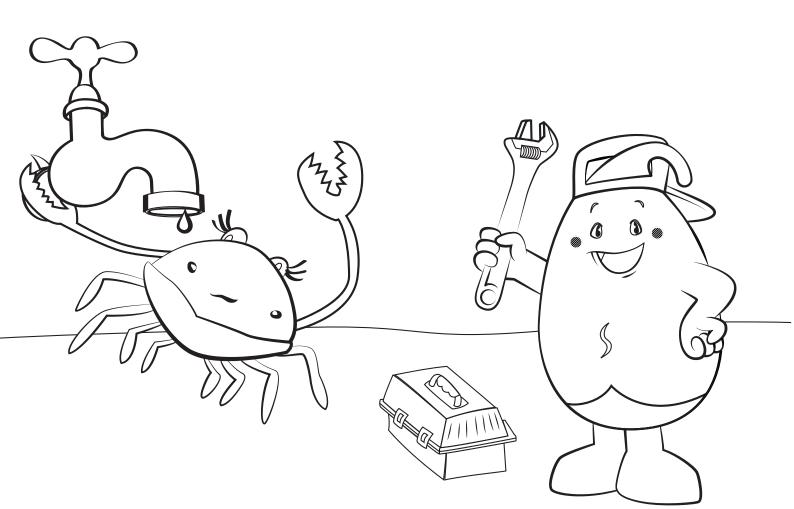
• Remind children the importance of informing adults to repair the dripping tap and help them develop a sense of responsibility.

Resources

- "Water Dripping Sound" (audio file) (from the DVD)
- "Pictures of Home Environment" (from the DVD)
- "Fixing the Dripping Tap" Colouring Worksheet (from the DVD)

- 1. Read the scene that Mrs Crab fixes the dripping tap on pages 20 to 23 of the storybook with the children.
- 2. Play "Water Dripping Sound" (from the DVD) and show the children "Pictures of Home Environment" (from the DVD). Ask them to locate the source of the sound and name the causes of a dripping tap.
- 3. Remind them to tell the adults to repair the tap if they find a dripping tap, or else water will be wasted.
- 4. Carry out water audit around the campus.





Distribute the "Fixing the Dripping Tap" Colouring Worksheet (from the DVD) to the children for colouring.



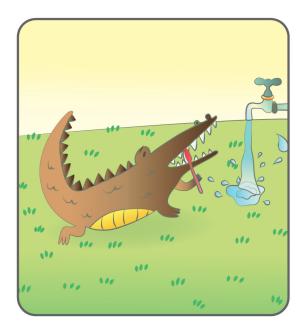
- Learn to turn off the tap and use a cup filled with water when brushing teeth.
- Extend children's water-saving habits to washing hands and turn off the tap when soaping their hands.

Self and Society

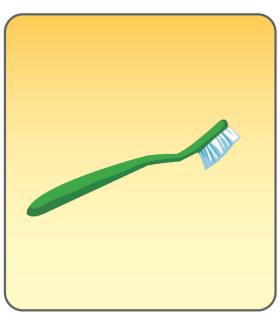
Resources

- "The Adventure of Water Save Dave and the Kingdom of Cando"
- Pictures of "Mr. Crocodile", "Running Tap", "Toothbrush" (a real one can be used) and "Cup" (a real one can be used) (from the DVD)
- A whiteboard

- 1. Read the scene that Mr. Crocodile brushes his teeth (pages 18 to 19) with the children.
- 2. Show the picture of "Mr. Crocodile" and imitate him brushing his teeth (while leaving the tap running).
- 3. Discuss the ways of brushing teeth with the children with the use of the pictures of "Running Tap", "Toothbrush" and "Cup".
- 4. Demonstrate how to brush teeth in a water-saving way (after the snack session):
 - Step 1: Turn on the tap
 - Step 2: Fill the cup with water for rinsing. Do not fill the cup too full
 - Step 3: Turn off the tap
 - Step 4: Rinse the mouth with the water in the cup before spitting the water out
 - Step 5: Put some toothpaste on the toothbrush
 - Step 6: Brush the teeth
 - Step 7: Rinse the soap out of the mouth with the water in the cup
 - Step 8: Use the remaining water in the cup to rinse the toothbrush
- 5. Discuss the followings with the children:
 - The uses of water
 - How to save water in our daily lives (such as turning off the tap while soaping hands and washing vegetables and fruits with the tap turned off)



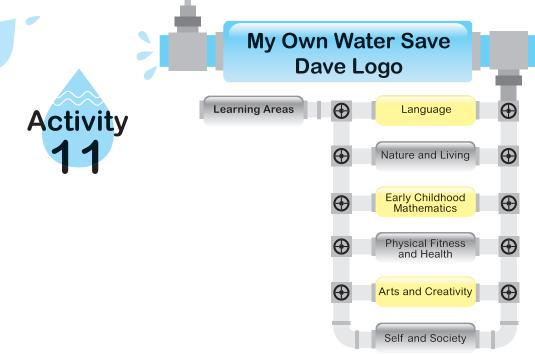






Be Aware and Wash with Care

- 1. It is recommended that teachers organize this activity before the snack session.
- 2. Demonstrate how to wash hands in a water-saving way:
 - Step 1: Wet the hands with little water
 - Step 2: Turn off the tap
 - Step 3: Soap the hands
 - Step 4: Rub the hands for about 20 seconds
 - Step 5: Rinse the hands under running water
 - Step 6: Dry the hands with a paper towel
 - Step 7: Turn off the tap by holding it with a paper towel



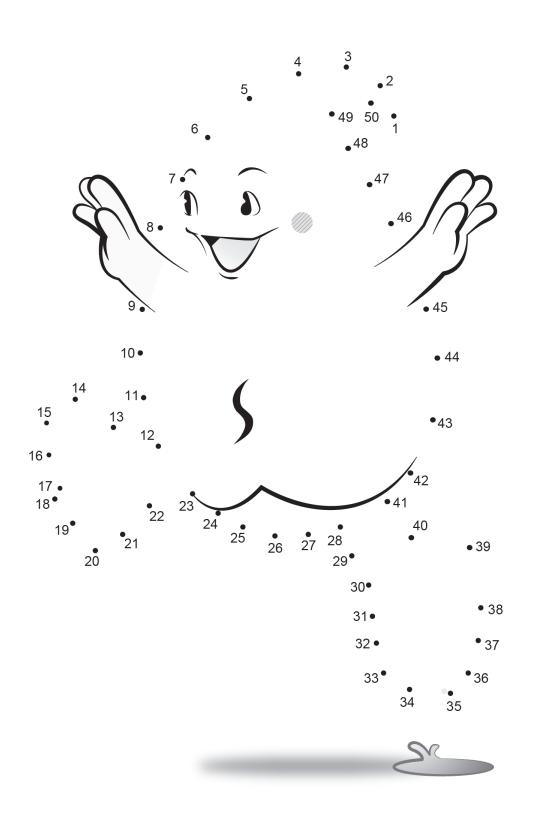
- Encourage creativity and strengthen children's bonds with water conservation.
- Help children understand more about Water Save Dave.

Resources

- "The Adventure of Water Save Dave and the Kingdom of Cando"
- "My Own Water Save Dave Logo" (from the DVD)
- Pieces of single-sided paper
- Colouring pencils
- Adhesive tape

- 1. Show the children pages 10 and 11 of the storybook and introduce Water Save Dave.
- 2. Distribute the worksheets "My Own Water Save Dave Logo" (from the DVD) and encourage the children to design their own logos.
- 3. Invite the children to introduce their works.
- 4. Remind the children to put water conservation into practice in their daily lives and cultivate water-saving habits in them.





- 1. Invite children to suggest places to display "My Own Water Save Dave Logo".
- 2. Display the logos at appropriate places.

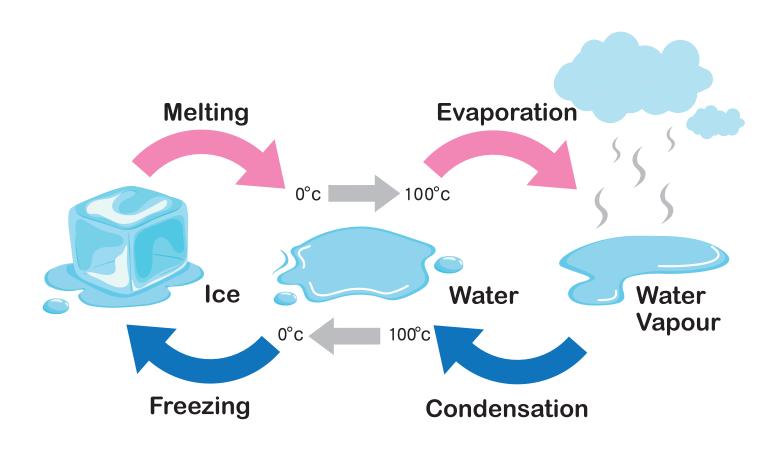


Enable children to understand the states of water through experiments: water boils to form steam and freezes to form ice.

Resources

- Pieces of single-sided paper
- Pens
- A jug of hot/warm water
- A cup with lid
- Ice cube mould, water and ice

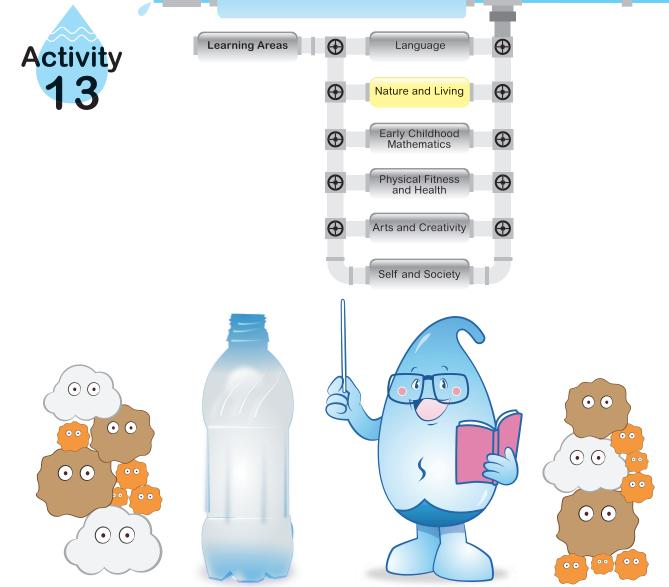
- 1. Read the scene that Water Save Dave feels hot and flies up into the air on pages 4 to 7 of the storybook with the children.
- 2. Invite the children to describe the appearance of Water Save Dave.
- 3. Ask the children to draw Water Save Dave in the form of water vapour.
- 4. Pour hot/warm water into the cup and put the lid on for three minutes.
- 5. Ask the children to observe the water vapour formed under the lid and explain that water turns into water vapour if it is heated.
- 6. Put aside the cup of water after observation. After the water inside cools down, ask the children to water the plants with the water and tell them to utilize every drop of water.



Freezing Ice

- 1. Pour water into the ice cube mould and put it in the refrigerator.
- 2. Show the mould to the children the following day and let them observe and touch the ice. Compare the ice with the water in room temperature and explain to the children that water freezes into ice when it is cold enough.
- 3. Put aside the mould. After the ice melts into water, ask the children to water the plants with the water and tell them to utilize every drop of water.
- 4. Conclusion: Water is a fluid that does not have a fixed shape. It changes from one state to another when heated or cooled. Water boils to form steam and freezes to form ice, while ice melts into water.

Magic Water Filter

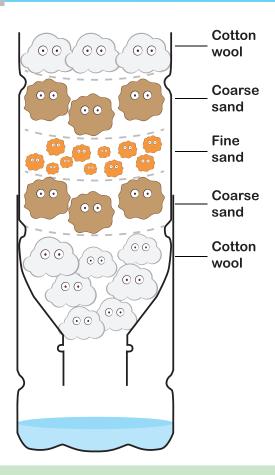


Objectives

• Introduce filtration to children, one of the methods of purification, through simple experiments, and enable them to understand that myriads of things have to be done to purify water so we should not pollute water sources.

Resources

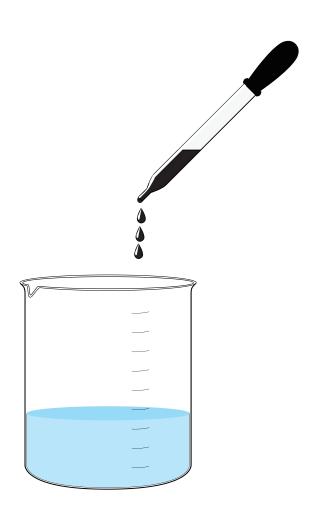
- Water mixed with mud and sand
- Transparent plastic bottle (cut in half beforehand)
- Cotton wool
- Fine sand
- Coarse sand



- 1. Show a cup of water mixed with mud and sand. Ask the children how to remove the impurities.
- 2. Show the plastic bottle that have been cut in half beforehand. Flip the top of the bottle over and put it in the bottom. Place some cotton wool at the bottom of the top part of the bottle. The cotton wool must be laid flat against the opening of the bottle to prevent the filter materials from slipping through.
- 3. Add coarse sand, fine sand and then coarse sand again in layers. Place some cotton wool again as the top layer.
- 4. Pour muddy water into the filter and ask the children to observe the changes when the muddy water flows through the filter to the bottom of the plastic bottle. Water should be poured into the filter slowly to prevent the filter materials from getting apart.
- 5. Invite the children to describe the change of muddy water after it flows through the filter? (it becomes clearer)
- 6. Conclusion: Water is a liquid that can slip through the spaces between the particles in the filter materials. The impurities in the muddy water are solid particles that cannot pass through holes smaller than themselves, getting trapped in the filter materials. Separated from the impurities, the water that goes through the filter is cleaner.
- *Tip: The clean potable water from the tap has gone through a series of purification processes at the water treatment works before it reaches us. Remember not to drink the filtered water after the experiment.







The Hidden Culprit

- 1. Prepare a transparent plastic cup, water and ink (can be substituted by paints).
- 2. Fill the plastic cup with water.
- 3. Add a few drops of ink into the water.
- 4. Ask the children to describe what happens.
- 5. Explain to the children that water resources get polluted easily like the water in this experiment. Therefore, we must protect and conserve our water resources together.

Activity Overview



	Language	Nature and Living	Arts and Creativity	Physical Fitness and Health	Early Childhood Mathematics	Self and Society
Activity 1 Listen, Read and Act Out	V		V			V
Activity 2 The Source of Life: Fill Up to Your Need	V	V			V	
Activity 3 What Are the Different Uses of Water?	/	V		V		
Activity 4 Saving Water: Dos and Don'ts	V			V		V
Activity 5 Blow Painting		V	V	V		V
Activity 6 Be a Water-Conscientious Kid	V				V	
Activity 7 Water Conservation Ensemble	V		V	V		V
Activity 8 My Water-Conscientious Family	V		V		V	V
Activity 9 Water Audit	V		V	V		V
Activity 10 Brush and Save	V			V		
Activity 11 My Own Water Save Dave Logo	V		V		V	
Activity 12 Wonderful Water		V				
Activity 13 Magic Water Filter		V				

Saving Water Everybody can do



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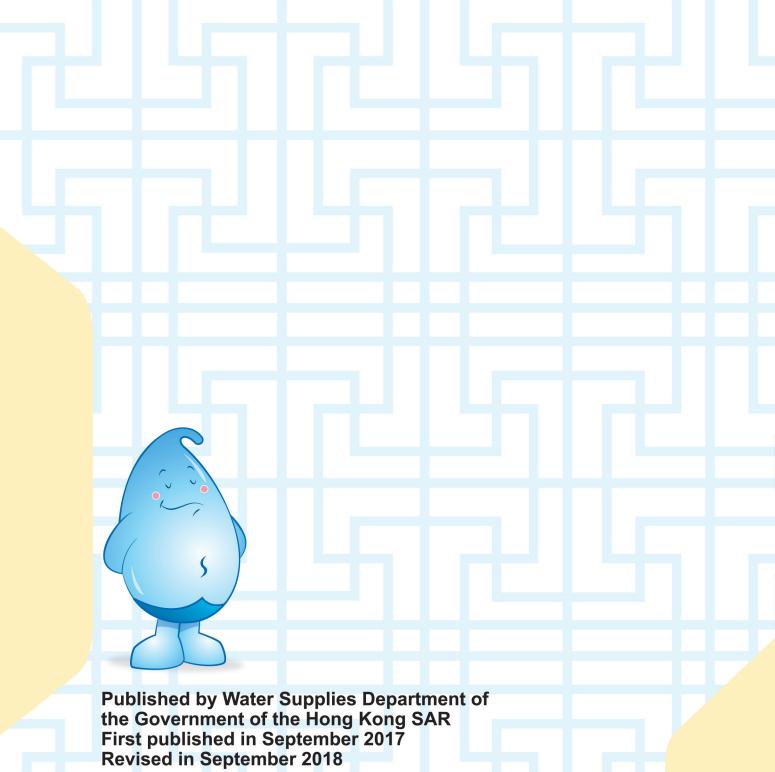
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