"The Water Cycle"

Video Activity Packet

Contents

• Preactivity for All Grades
  - Teacher Instructions
  - 6 labels for Prior Knowledge Inventory Chart (6 sheets, each 8 1/2" x 14", single-sided).

• Post Viewing Activity for Grades K-3
  - Teacher Instructions
  - Student booklet pages (2 sheets, each 8 1/2" x 11", double-sided).

• Post Viewing Activity for Grades 4-6
  - Teacher Instructions
  - Student mini book (1 sheet, 8 1/2" x 14", single-sided).

• Evaluation Forms
  - Viewer Evaluation
  - Activity Evaluation
Preactivity Teacher Instructions
Prior Knowledge Inventory
"KWL" - Know - Want to Know - Learned
for "The Water Cycle" Video

MATERIALS:
- The 6 labels (provided in packet)
- Butcher paper
- Pen
- Glue stick

PREPARATION:
- Copy 6 labels (keep originals for future use)
- Teacher prepares "KWL" Chart using butcher paper, glue and labels as shown:

<table>
<thead>
<tr>
<th>Column #1</th>
<th>Column #2</th>
<th>Column #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>What We Know About The Water Cycle</td>
<td>What We Want To Know About the Water Cycle</td>
<td>What We Learned About The Water Cycle</td>
</tr>
</tbody>
</table>

Row #1

<table>
<thead>
<tr>
<th>What We Know About How Water Gets To Us</th>
<th>What We Want To Know About How Water Gets To Us</th>
<th>What We Learned About How Water Gets To Us</th>
</tr>
</thead>
</table>

Row #2

PROCEDURES:

STEP 1
- Teacher elicits responses from students on Row #1 (columns 1 & 2):
  1. What they think they know about the water cycle. Teacher records responses.
  2. What more they’d like to know about the water cycle. Teacher records responses.

STEP 2
- Teacher elicits responses from students on Row #2 (columns 1 & 2):
  1. What they think they know about how water gets to us ready to use. Teacher records responses.
  2. What more they’d like to know about how water gets to us ready to use. Teacher records responses.

STEP 3
- TEACHER SHOWS VIDEO

STEP 4
- The final column #3 (rows #1 + #2) will be completed after students complete the Post Viewing Activities.
What We Know About The Water Cycle
What We Want to Know About The Water Cycle
What We Learned About The Water Cycle
What We Know About How Water Gets To Us
What We Want to Know About How Water Gets To Us
What We Learned

About How Water Gets To Us
NOTE
Do the first part of the (KWL) prior knowledge inventory before showing the video. Show entire video in one sitting.

MATERIALS
One copy of booklet per student (2 double-sided 8.5 by 11 inch pages). Crayons or markers. Page 8 Build a water cycle cup — materials needed: cup, water, plastic wrap, rubber band.

BOOKLET PROCEDURES

1. Fold copies in half (width-wise) creating a 5.5 by 8.5 inch rectangular booklet. Be sure the pages are in numbered order.
2. Have students color booklet cover and write name on the line.
3. Show the video a second time and pause after each video experiment to allow students time to record what they saw in their booklets.
4. After viewing experiment #1 have students complete page 2 in the booklet.
5. After viewing experiment #2 have students complete page 3 in the booklet.
6. Have students complete pages 4 and 5 (draw the water cycle) before viewing experiment #3.
7. After viewing experiment #3 have students complete page 6.
8. On page 7 have students illustrate four ways that they use water and complete a sentence for each use.
9. Students will build a water cycle cup. Follow steps 1-4 on page 8. Place the cup in the sun and observe it to see the stages of the water cycle. Have students record observations. It should take about 10-15 minutes for evaporation and condensation to occur.
   Note: On a cloudy or cool day put hot water into the cup to promote evaporation.

CLOSURE

1. Have students share what they wrote on the pages of their booklets.
2. Have the class complete the final column 3 of the KWL inventory chart.

ANSWER KEY FOR BOOKLET:

pg. 2 Water is stored in rock layers.
pg. 3 This is how the water cycle works.
pg. 4 & 5 Evaporation from the water source (ocean), condensation in clouds, precipitation in the form of rain or snow, and accumulation (label lake or ocean).
pg. 6 Water is filtered and cleaned before we drink it.
pg. 7 Answers will vary.
pg. 8 Water cycle cups will show condensation, precipitation (drops), and accumulation.
MAKE A WATER CYCLE

You will need:
- a cup
- water
- plastic wrap
- a rubber band

DRAW what happened

To Do:
1. Pour a small amount of water into the cup.
2. Cover the cup with plastic wrap.
3. Put a rubber band over the top to hold the plastic wrap.
4. Put outside in the sun.

NAME ____________________________

DRAW PICTURES OF
WAYS YOU USE WATER

I use water

I use water

I use water

I use water

EXPERIMENT 1
DRAW WHAT YOU SAW

Water is stored in layers in the earth.

with sand and water

pebbles and water

EXPERIMENT 3

DRAW WHAT YOU SAW

before the water is filtered

after the water is filtered

is filtered and cleaned before we drink it.

This is how the ______ works.
Post Viewing Activity - Teacher Instructions

"The Water Cycle" grades 4-6

NOTE
Do the first part of the (KWL) prior knowledge inventory before showing the video.

MATERIALS
Mini book master, scissors, crayons or markers, pencil.

MINI BOOK PREPARATION

1. Copy the mini book master on 8.5 by 14 inch copy paper (1 per student).

2. Fold the mini book in half width wise (this will resemble a square).

3. Cut along the dotted line through both layers of the paper. You will only cut half way into the middle of the square.

4. Open the paper to full size and fold in half length-wise with the printing on the outside.

5. Stand the paper upright on the desk (like a tent) with the open edge at the bottom and pages 2, 3, 4 & 5 facing you.

6. Grab the outside edges of the paper and push gently towards the center creating a 4 sheet booklet.

7. Fold together so that the number of pages are in order, and the cover is at the front of the book.

MINI BOOK PROCEDURES

Show the video completely in one sitting. Reshow video pausing after each experiment to allow students time to complete mini book exercises.

Page 1. Students color the cover and write name on the line.

Page 2. Students draw and label the illustration to show groundwater, aquifer, and percolation.

Page 3. Students will fill in blank A with the word evaporation and blank B with the word condensation.

Page 4. Students will write what they know about the water cycle.
Page 5. Students draw an illustration of the water cycle using words from the word bank.

Page 6. Students color the cups in the book to show the appearance of the water before and after filtering. They answer the question about unsafe water. Ans. “The water contains microorganisms that make you sick”.

Page 7. Students sequence the stages of water treatment.
Ans. 4
1 5
2 3

Page 8. The students write what they know about how we get water ready for use.

CLOSURE

1. Have the students exchange mini books with a partner, read them to detect any errors, and return them to the owners for revision.
2. Teacher collects the mini books and evaluates them.
3. Have the class complete the final column 3 of the KWL inventory chart.
Activity Evaluation Form
for
"The Water Cycle"

In order to better serve California schools, we need your feedback on the activity sheets that accompany this video. Please complete this short evaluation form and fax to Department of Water Resources at (916) 653-4684, attn. Michelle Robinson or fold, tape, stamp and mail to address on the reverse side.
Thanks for your help.

NAME ___________________________ SCHOOL ___________________________

ADDRESS ___________________________ CITY __________ STATE ______ ZIP __________

PHONE NUMBER ___________________________

PLEASE CIRCLE OR FILL IN THE APPROPRIATE ANSWER

1. Grade level taught: K 1 2 3 4 5 6
Other ___________________________

2. Activity used: KWL Chart K-3 Booklet 4-6 Mini Book

3. Have you used this activity before? Yes No

4. Would you use it again? Yes No

5. Using a grading scale:

- 5 = excellent, 4 = good, 3 = average, 2 = poor, 1 = very poor
- Please rate how well the activity met the following:
  - Helped to reinforce your student’s understanding of the video
  - Helped to increase your student’s knowledge of water
  - Instructions easy to follow
  - Interest to your students

6. Would you recommend this to others? Yes No

7. How could this activity be improved? (other comments)__________________________

__________________________

__________________________

__________________________

__________________________

__________________________
Department of Water Resources
Public Affairs Office
1416 9th St. Room 215-39
Sacramento, CA 95814
Attn: Michelle Robinson
Viewer Evaluation Form
for "The Water Cycle" Video

To assist the California Department of Water Resources Office of Water Education in future programming, your comments on the video you have just received would be greatly appreciated. Please complete this short evaluation form and fax to Department of Water Resources at (916) 653-4684, attn. Michelle Robinson or fold, tape, stamp and mail to address on the reverse side. Thanks for your help.

### About the video:

(Please circle your answers)

<table>
<thead>
<tr>
<th>Grade level specified on video:</th>
<th>a. K-3</th>
<th>b. 4-6</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Was the video:</th>
<th>a. Appropriate for grade level specified</th>
<th>b. Not appropriate</th>
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<table>
<thead>
<tr>
<th>Do you think the video was:</th>
<th>a. Too long</th>
<th>b. Too short</th>
<th>c. About right</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Was the video:</th>
<th>a. Easy to understand</th>
<th>b. Hard to understand</th>
<th>c. About right</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Did the video have:</th>
<th>a. Too much information</th>
<th>b. Too little information</th>
<th>c. About right</th>
</tr>
</thead>
</table>

### On a scale of one to five:

<table>
<thead>
<tr>
<th>Was the video:</th>
<th>Boring 1 2 3 4 5 Interesting</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Did students:</th>
<th>Learn very little 1 2 3 4 5 Learn a lot</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Was the information:</th>
<th>Confusing 1 2 3 4 5 Explained well</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Were the graphics:</th>
<th>Unclear 1 2 3 4 5 Clear</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Were there:</th>
<th>Too few graphics 1 2 3 4 5 Enough graphics</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How well did the video fit into Curriculum requirements</th>
<th>Bad fit 1 2 3 4 5 Good fit</th>
</tr>
</thead>
</table>

### What did you like about the video and any other comments:

____________________________________________________________________________

____________________________________________________________________________

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____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

NAME ___________________________ SCHOOL ___________________________ GRADE LEVEL ___________________________

ADDRESS ___________________________ CITY ___________________________ STATE ___________________________ ZIP ___________________________

PHONE NUMBER ___________________________
Learn:

- How the water cycle works
- How water is cleaned & purified
- How water is delivered to your home

3 Exciting Experiments
You Can Do that Show:

- How water is stored underground
- How heat from the sun makes the water cycle work
- How gravel & sand can help clean water