

Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project

Grade 5 Unit 3: Earth Systems and the Solution of Water Problems

Task 1 Prompt 1 Parts A-D Scored and Annotated Anchor Set

May 2025

Grade 5 Unit 3: Earth Systems and the Solution of Water Problems, Task 1 Prompt 1 Parts A-D Scored and Annotated Anchor Set was developed with funding from the U.S. Department of Education under the Competitive Grants for State Assessments Program CFDA 84.368A. The contents of this paper do not represent the policy of the U.S. Department of Education, and no assumption of endorsement by the Federal government should be made.

All rights reserved. Any or all portions of this document may be reproduced and distributed without prior permission, provided the source is cited as: Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project. (2025). *Grade 5 Unit 3: Earth Systems and the Solution of Water Problems, Task 1 Prompt 1 Parts A-D Scored and Annotated Anchor Set.* Lincoln, NE: Nebraska Department of Education.

Prompt 1 Parts A-D Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Parts A – D.	No aspect of the response is correct	Response includes one (1) of the four (4) aspects	Response includes two (2) of the four (4) aspects	Response includes three (3) of the four (4) aspects	Response includes the following aspects:

Score Point 4 (4/4 aspects met)

- Parts A-D
 - Includes the toilet as using the most water.
 - Includes the dishwasher as using the least water.
 - Includes saving 4.5 gallons of water by replacing the toilet.
 - Includes 10 flushes as the amount of water lost by a leaking toilet.

A	. Which activity uses the	most water in Fig	ure 1?	
	Using the	tolet	514745-10	
D	Whileh past is			
D.	Which activity uses the	least water in Figu	ire 1?	
	Using the o	Ishwashe	r	
-	J			
le	ne average American famil	y uses more than	300 gallons of wa	ter per day! Based on Figure 1,
Th	nat's a lot of water loss!	ount for 15 gallons	s or water loss pe	r day, or 5,475 gallons per year.
	99			22
Ta	ble 1 compares the water	usage of two type	es of toilets.	Cicla
		Table 1. Toi	let Water Usage	26:0
		Charles and Charles of the Charles o		15
		Type of Toilet	Gallons per Flush	1,5
		Standard	6.0	4.5
		Low-flow	1.53	
C.	How much water would	a homeowner sav	e ner fluch hy ren	lacing a standard toilet with a
	1.1	_	e per musit by rep	acing a standard tollet with a
	low-flow toilet?	121	gallons	
D	Per day how many flush	or of a law flame.		
υ.	Per day, how many flush	es or a low-flow to	let equal the am	ount of water lost by the
	leaking toilets in each ho	usehold?	0	flushes

Prompt 1 Parts A-D Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Parts A – D.	No aspect of the response is correct	Response includes one (1) of the four (4) aspects	Response includes two (2) of the four (4) aspects	Response includes three (3) of the four (4) aspects	Response includes the following aspects: A. Using the toilet B. Using the dishwasher C. 4.5 D. 10

Score Point 3 (3/4 aspects met)

- Parts A-D
 - Includes the toilet using the most water.
 - Includes the dishwasher using the least water.
 - Does **NOT** include saving
 4.5 gallons of water by replacing the toilet.
 - Includes ten flushes as the amount of water lost by a leaking toilet.

A.	Which activity uses the most water in Figure 1? USing the toilet
В.	Which activity uses the least water in Figure 1? USING dish Washer

The average American family uses more than 300 gallons of water per day! Based on Figure 1, leaking standard toilets account for 15 gallons of water loss per day, or 5,475 gallons per year. That's a lot of water loss!

Table 1 compares the water usage of two types of toilets.

Table 1. Toilet Water Usage

Type of Toilet	Gallons per Flush
Standard	6.0
Low-flow	1.5

C.	How much water	would a	homeowner	save per flush	by replacing	a standard	toilet with a
	low-flow toilet?_	5.5	/	gal	lons	\	

D. Per day, how many flushes of a low-flow toilet equal the amount of water lost by the leaking toilets in each household? ______flushes

Prompt 1 Parts A-D Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Parts A – D.	No aspect of the response is correct	Response includes one (1) of the four (4) aspects	Response includes two (2) of the four (4) aspects	Response includes three (3) of the four (4) aspects	Response includes the following aspects: A. Using the toilet B. Using the dishwasher C. 4.5 D. 10

leaking toilets in each household?_

Score Point 2 (2/4 aspects met)

- Parts A-D
 - Includes the toilet using the most water.
 - Includes the dishwasher using the least water.
 - Does **NOT** include saving 4.5 gallons of water by replacing the toilet.
 - Does **NOT** include ten flushes as the amount of water lost by a leaking toilet.

A.	Which activity uses the	most water in Figu	re 1?	
В.	Which activity uses the I		re 1?	
lea	•	•	-	ter per day! Based on Figure 1, r day, or 5,475 gallons per year.
Ta	ble 1 compares the water	usage of two type	es of toilets.	
		Table 1. Toil	let Water Usage	
		Type of Toilet	Gallons per Flush	
		Standard	6.0	
		Low-flow	1.5	
C.	How much water would low-flow toilet?	a homeowner sav	e per flush by rep	olacing a standard toilet with a

Prompt 1 Parts A-D Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Parts A – D.	No aspect of the response is correct	Response includes one (1) of the four (4) aspects	Response includes two (2) of the four (4) aspects	Response includes three (3) of the four (4) aspects	Response includes the following aspects: A. Using the toilet B. Using the dishwasher C. 4.5 D. 10

Score Point 1 (1/4 aspects met)

- Parts A-D
 - Includes the toilet using the most water.
 - Does **NOT** include the dishwasher using the least water.
 - Does **NOT** include saving 4.5 gallons of water by replacing the toilet.
 - Does **NOT** include ten flushes as the amount of water lost by a leaking toilet.

A.	Which	activity	uses t	he most	water	in Figure 1)
	28	% (Sino	the	ti	10,1	

B. Which activity uses the least water in Figure 1?

5	0,	leaking	_to:le
2	10	Ranial	-10:101

The average American family uses more than 300 gallons of water per day! Based on Figure 1, leaking standard toilets account for **15 gallons of water loss per day,** or 5,475 gallons per year. That's a lot of water loss!

Table 1 compares the water usage of two types of toilets.

Table 1. Toilet Water Usage

Type of Toilet	Gallons per Flush	
Standard	6.0	
Low-flow	1.5	

C.	How much water would a homeowner save per flush by replacing a standard toilet with					
	low-flow toilet? _	286	gallons			

D. Per day, how many flushes of a low-flow toilet equal the amount of water lost by the

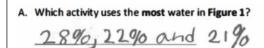
leaking toilets in each household? _____flushes

Prompt 1 Parts A-D Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Parts A – D.	No aspect of the response is correct	Response includes one (1) of the four (4) aspects	Response includes two (2) of the four (4) aspects	Response includes three (3) of the four (4) aspects	Response includes the following aspects: A. Using the toilet B. Using the dishwasher C. 4.5 D. 10

Score Point 0 (0/4 aspects met)

- Parts A-D
 - Does **NOT** include the toilet using the most water.
 - Does **NOT** include the dishwasher using the least water.
 - Does **NOT** include saving 4.5 gallons of water by replacing the toilet.
 - Does **NOT** include ten flushes as the amount of water lost by a leaking toilet.



B. Which activity uses the least water in Figure 1?

The average American family uses more than 300 gallons of water per day! Based on Figure 1, leaking standard toilets account for 15 gallons of water loss per day, or 5,475 gallons per year. That's a lot of water loss!

Table 1 compares the water usage of two types of toilets.

Table 1. Toilet Water Usage

Type of Toilet	Gallons per Flush
Standard	6.0
Low-flow	1.5

C.	How much water would a homeowner save per flush by replacing a standard toilet wit				
	low-flow toilet?_	1.5	gallons		

D. Per day, how many flushes of a low-flow toilet equal the amount of water lost by the leaking toilets in each household? ______flushes