



INDOOR WATER USE DATA COLLECTION

A lot of information is needed to calculate how much water we use. Use the following steps to help you collect data on how much water you use each day. Complete Step One and Step Two at home with the help of a parent or guardian.

STEP ONE: DIRECT WATER USE DATA COLLECTION

Use the table below to collect the data you will need to calculate the amount of water you use each day. Data that you will be collecting includes: length of time you do an activity using water; the number of times you do an activity using water; and the flow rate of the fixture you are using.

TABLE 1: INDIVIDUAL WATER USES DATA

	A	B
WATER USE ACTIVITY	LENGTH OF TIME OR NUMBER OF TIMES PER DAY	FLOW RATE OF FIXTURE* OR AMOUNT USED
Shower		
Bath		
Toilet		
Bathroom faucet(s)		
Kitchen faucet(s)		
Water for drinking		
Dishwasher		
Laundry		

TABLE 2: FAMILY WATER USES DATA

WATER USE ACTIVITY	NUMBER OF TIMES PER WEEK	GALLONS PER CYCLE
Dishwasher		
Laundry		

**If you aren't sure of the flow rate of a fixture, there are a few things you can do to find out.*

1. **LOOK FOR LABELS.** Some faucets and toilets will have labels identifying how much water is used. Look for these labels above and below the sink.

2. **TIME IT.**

a. **For a faucet:** Get a large bowl and a timer. Set your timer for 10 seconds. Turn the faucet on full blast and insert your bowl under the flow at the same time you start your timer. After 10 seconds turn off the water. Count the number of 1-cup measures you have collected in the bowl, convert to gallons and multiply by 6 (see example below, then use the table below to decide if your fixture is efficient or not. Use the water in the bowl to water plants, fill your bath or clean. Don't pour it down the drain.

Example: You collect 7 cups of water
Your calculations will look like this:
7 cups of water x 8 ounces per cup = 56 ounces
56 ounces ÷ 128 ounces per gallon = 0.4375 gallons
0.4375 gallons x 6 (number of 10 second blocks per minute) =
2.625 gallons per minute (GPM)

SOME HELPFUL CONVERSIONS:
1 CUP = 8 OUNCES
128 OZ = 1 GALLON

b. **For toilets:** Calculate the volume of the toilet tank with a tape measure or ruler by measuring the length, width and depth (in inches) of the toilet tank. Divide the answer by 231 to get the number of gallons.

Example: 13 inches x 14 inches x 3 inches = 546 cubic inches
546 cubic inches ÷ 231 = 2.4 gallons

3. **ASK YOUR PARENTS IF THEY KNOW.** They may have purchased water-efficient fixtures deliberately or know which year they were installed. Most fixtures purchased and installed after 1990 are water efficient.

4. **ESTIMATE.** Use the chart below to estimate the flow rate of fixtures in your house. Generally, if you live in an older home (built before 1990), fixtures are less efficient (unless they have been recently replaced) than fixtures in newer homes.

WATER USE ACTIVITY	INEFFICIENT		EFFICIENT	
Shower	5 gallons per minute (GPM)	2.5 GPM	2 GPM	1.5 GPM
Toilet	3 gallons per flush (GPF)	1.6 GPF	1.28 GPF	1.1 GPF
Faucet	5 GPM	2.5 GPM	1.5 GPM	1 GPM
Bathtub	40 gallons, standard tub	70 gallons, jet tub	N/A	
Dishwasher	6 gallons per cycle (GPC)		4 GPC	
Clothes Washer	36 GPC, standard top-load		22 GPC	14 GPC



Weather Word Find



C	G	P	D	H	R	A	M	T	S	L	A	E	P	M	F	B	I	S	E
A	L	S	I	E	T	Z	H	L	E	S	L	N	D	N	A	D	E	E	R
T	O	O	U	D	T	U	E	T	T	T	W	E	R	U	E	E	U	O	R
M	T	F	U	N	N	E	L	C	L	O	U	D	C	T	Z	E	A	E	E
O	H	R	O	D	T	E	M	P	E	R	A	T	U	R	E	N	S	O	A
S	E	V	E	R	E	S	T	O	R	M	O	B	T	D	E	E	E	R	W
P	R	R	W	A	R	N	I	N	G	S	E	E	N	M	R	P	A	J	E
H	M	D	F	Z	R	L	U	G	C	H	R	I	O	A	B	D	U	V	N
E	O	U	L	Z	N	C	H	T	O	E	W	M	R	E	A	A	R	S	I
R	M	H	A	I	L	I	S	H	N	L	E	I	F	R	E	R	O	C	O
E	E	R	S	L	G	D	T	O	V	T	O	C	D	T	S	E	I	Y	O
H	T	O	H	B	R	H	L	Y	E	E	C	R	L	S	H	C	T	A	W
T	E	S	F	Y	G	C	T	R	C	R	R	O	O	T	L	F	N	T	F
A	R	U	L	U	Y	R	W	N	T	M	A	B	C	E	L	R	O	O	O
E	B	I	O	C	E	N	A	C	I	R	R	U	H	J	T	R	R	G	R
W	N	R	O	U	L	R	D	I	O	N	Z	R	E	S	N	E	F	R	T
E	D	S	D	E	W	P	O	I	N	T	G	S	A	A	C	E	M	D	C
O	E	K	A	L	F	W	O	N	S	S	C	T	D	A	E	H	R	O	I
M	C	C	O	R	U	H	A	N	E	T	R	O	S	E	N	H	A	I	E
A	L	Y	A	E	O	C	M	L	M	D	R	T	U	N	M	N	W	I	I

- | | | | |
|------------|--------------|---------------|-------------|
| AIR | FLASH FLOOD | METEOROLOGIST | SUPERCCELL |
| ANEMOMETER | FOG | MICROBURST | TEMPERATURE |
| ATMOSPHERE | FORECAST | RADAR | THERMOMETER |
| BLIZZARD | FUNNEL CLOUD | RAIN | THUNDER |
| CLOUD | HAIL | SEA BREEZE | TORNADO |
| COLD FRONT | HURRICANE | SEVERE STORM | WARM FRONT |
| CONVECTION | ICICLE | SLEET | WARNING |
| DEW POINT | JET STREAM | SNOWFLAKE | WATCH |
| DROUGHT | LIGHTNING | STORM SHELTER | WEATHER |
| DRY LINE | MESOCYCLONE | SUN | WIND |

Prepare for the storm!

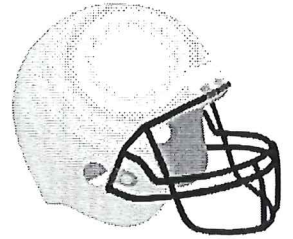


It is a good idea to pack an emergency backpack when the weather is still nice and you are not in a hurry. Here are some things you should have packed to be ready for a storm!



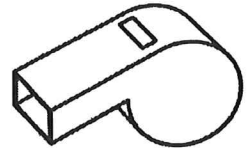
Sturdy shoes will protect your feet from things that may break in the storm and be sharp on the ground.

Wear a bike or football helmet to protect your head from being hurt by things blowing in the storm.



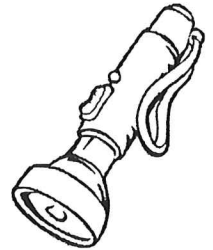
A sweatshirt or jacket will keep you warm at night if you don't have a blanket.

If you need help, you can blow a whistle so people can find you.



It is easy to get thirsty in a storm. Make sure you have extra water!

A flashlight will give you light if the power goes out.



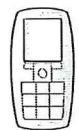
Sometimes storms last a long time, so it is good to have extra snacks to keep your tummy happy.

Band-aids will cover up small cuts if you get hurt.



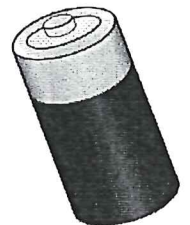
It's okay to keep a friend with you if you are scared.

You can use a cell phone to call for help.



You can listen to a radio to learn about what people are doing to help you.

Pack extra batteries and a cell phone charger to keep your radio, flashlight, and phone working.



Bonus Words Week 28

You'll be tested on 5 out of the 10! Study!

1. Temperature
2. Meteorologist
3. Atmosphere
4. Exponents
5. Evaluate
6. Variable
7. Coefficient
8. Prejudice
9. Tolerance
10. Equality

Why Should You Look Out for a Pig That Knows Karate?



Simplify or evaluate each expression below, as directed. Find your answer in the corresponding answer column. Write the letter of the exercise in the box that contains the number of the answer.

OBJECTIVE 1-b: To apply rules for order of operations; evaluate variable expressions.

SIMPLIFY:

- ① $4 \cdot 9 + 1 \approx 37$
- ② $6 + 7 \cdot 10$
- ③ $42 - 2 \cdot 7$
- ④ $8 + 50 \div 2$
- ⑤ $(10)(3) - 4$
- ⑥ $2 \cdot 8 + 3 \cdot 5$
- ⑦ $\frac{60}{3} - (2)(4)$
- ⑧ $5 \cdot 12 + \frac{32}{16}$
- ⑨ $3 + 2 \cdot 5 \cdot 8$
- ⑩ $(4)(6)(3) - 20 + 1$
- ⑪ $18 \div 2 \times 3$
- ⑫ $3 \cdot 3 + 4 \cdot 4 - 5 \cdot 5$

Answers:

- ⑦ 62
- ⑫ 27
- ⑨ 37
- ⑤ 31
- ⑫ 33
- ② 76
- ⑮ 12
- ⑮ 0
- ⑫ 83
- ⑭ 28
- ① 53
- ⑪ 26

EVALUATE if $a=2$, $b=3$, $x=5$, $y=8$, and $w=20$:

- ① $4x + 7$
- ② $1 + 6y$
- ③ $9 - 2b$
- ④ $8x + 3y$
- ⑤ $a + bw$
- ⑥ $aw - by$
- ⑦ $b + \frac{w}{x}$
- ⑧ $\frac{bw}{x} - a + 7$
- ⑨ $abxy - 5w$
- ⑩ $36 - 4ab$
- ⑪ $5 + 3x - \frac{w}{a}$

Answers:

- ⑩ 16
- ⑬ 10
- ⑧ 17
- ⑫ 49
- ⑬ 64
- ⑮ 12
- ④ 27
- ⑮ 7
- ③ 62
- ⑮ 140
- ⑥ 3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
								I															

Show work on back of paper!

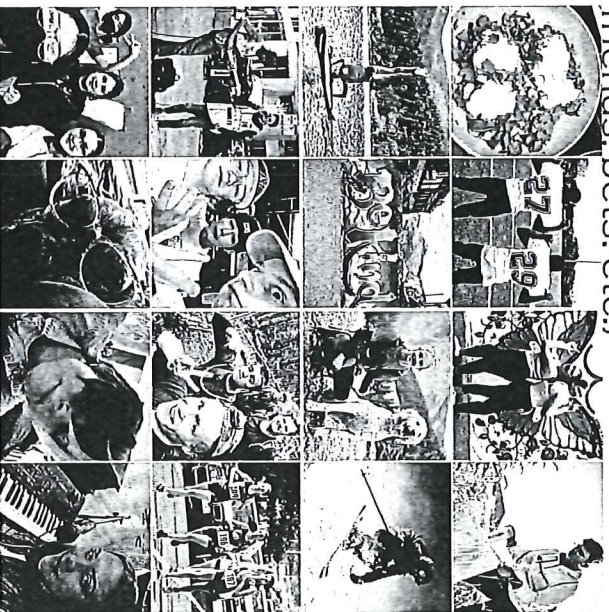
IA BINGO - COMPLETE ALL THE TASKS ON THIS BINGO CARD!

Watch a video that teaches you how to perform a hard reset of your smartphone	Watch an episode of a TV show that you've never seen before	Watch 5 minutes of something in a different language with English subtitles
Learn how to say "hello" and "goodbye" in 2 new languages	Draw your favorite superhero	Do 25 air squats
Do 25 jumping jacks	Listen to 3 songs that you have never heard before	Watch a video that teaches you how to recycle or upscale a pair of tennis shoes
Hum a tune	Play charades for at least 5 minutes with a family member or friends	Draw your favorite food

How to Participate

Step 1:

Choose or take a photo showing how YOU fill your world with good (sports, music, friends, pets, etc.)



Step 2:

Scan this QR code or visit riseaboveco.org/fill-your-world-with-good-submit/



Step 3:

Upload the photo or video. We'll track submissions from your school & we'll send you prizes too!

First Name

Last Name (only to be used to award prizes)

Email (only to be used to award prizes)

Town

School

Comment - tell us something about your post

Select A File To Upload (Graphic or Video)

No file chosen