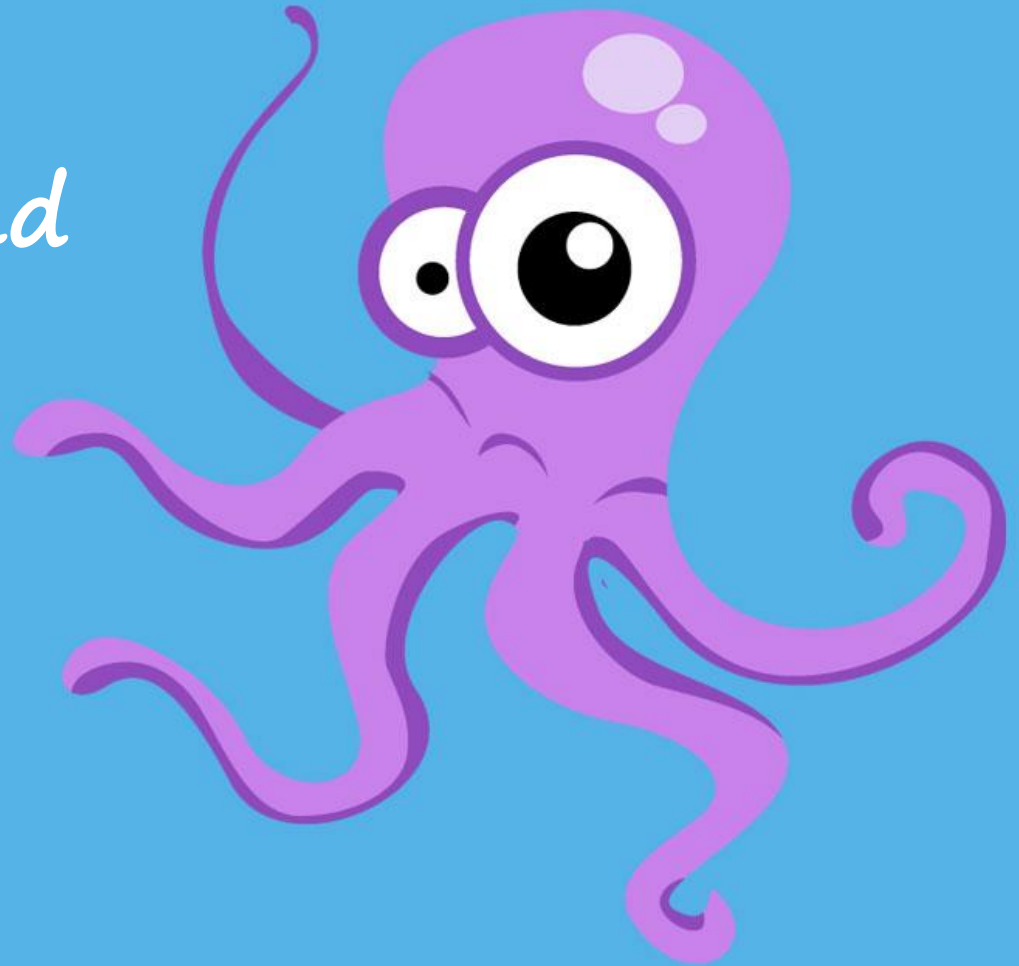


St. Michael's  
Church of Ireland  
National School

2017

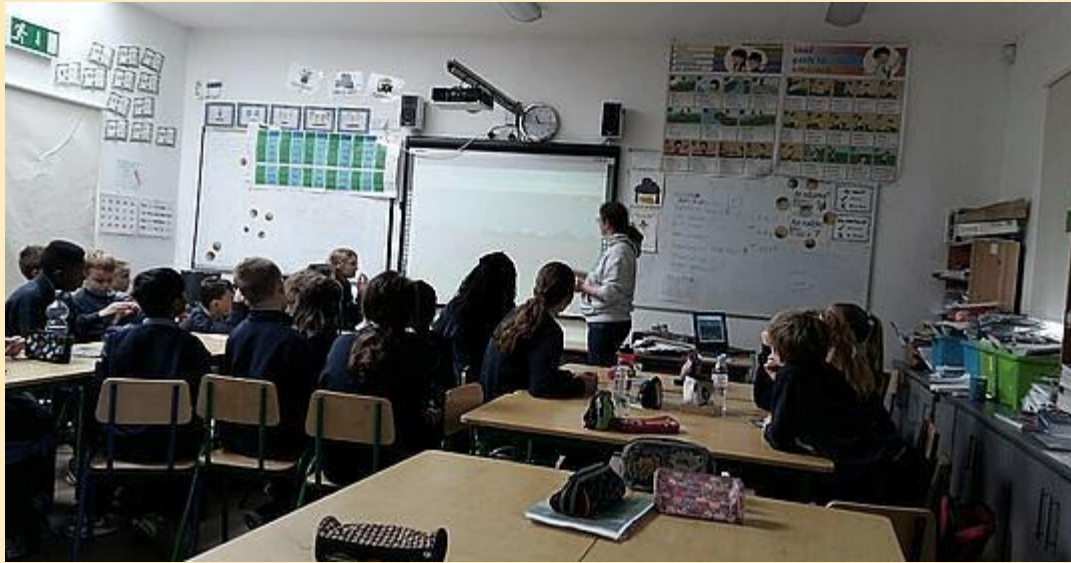


# water EXPLORER

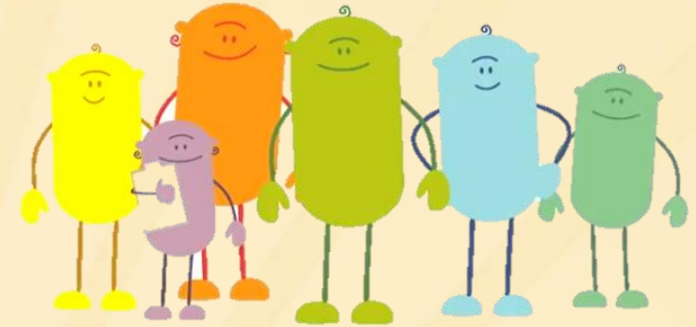
**WATER WALKERS**  
Senior room St Michael's

**1190** points



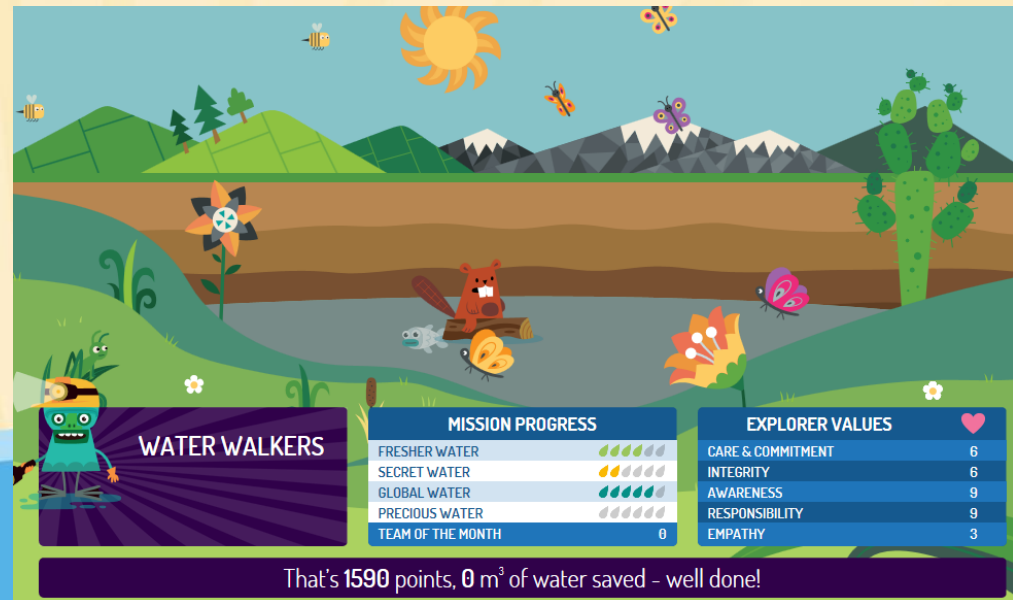


Oonagh from Water Explorers came to visit us at the school on 27 April and we were so excited about the project.



We decided that we were going to 'tackle' the challenge and really try our best to 'fill up our reservoir'!!!

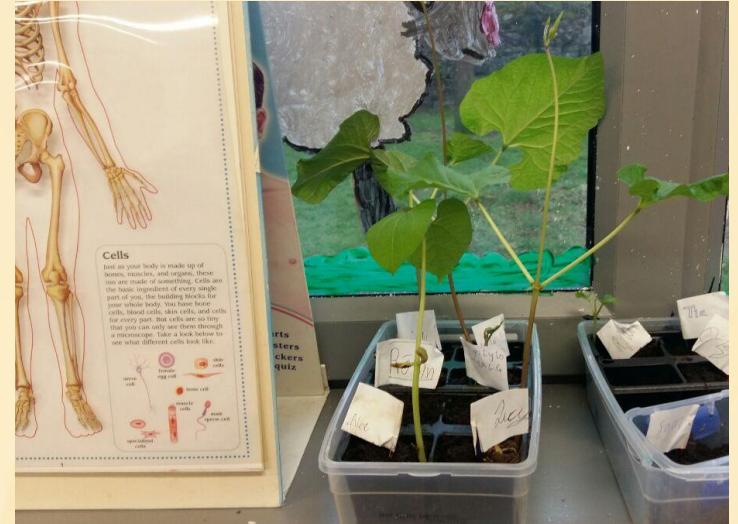
We worked really hard on all our projects and found them very interesting and fun to do





# WE EXPLORED WATER THROUGH SCIENCE





# Experiments

Dancing Raisins

Growing Beans

Growing Crystals





# Experiments

## Different Types of Water Filters





# Experiments

How Much Water Does It  
Take To Produce A Small  
Fruit Salad?



797.8L





# Experiments

Which Dietary Breakfast  
Has The Smallest Water  
Footprint



**Full Irish**  
1994L

**Vegetarian**  
910.9 L

**Vegan**  
1402.9L

Full Irish Breakfast		
Ingredients	Water needed to produce Food	Water used
1 Fried egg	1 egg = 196 L.	1 = 196 L.
1 sausage (pork) = 49g	1 kg = 5998 L.	1 = 294 L.
2 black puddings (pork) = 75g	1 kg = 5998 L.	2 = 450 L.
1 slice toast	1 = 40 L.	1 = 40 L.
2 Rashers (pork) = 30g	1 kg = 5998 L.	2 = 360 L.
1 Glass apple Juice	1 Glass = 190 L.	1 = 190 L.
6 Strawberries	1 strawberry = 1.5 L.	6 = 9 L.
4 Tbsp Vegetable Oil	15 ml = 93 L.	4 = 372 L.
1 Tbsp Butter	1 kg = 5553 L.	1 = 83.5 L.
		Total
		1994 L.

Vegan Fried Breakfast		
Ingredients	Water needed to Produce Food	Water used
250g Tofu	500 g = 1191 litres.	250g = 572 litres.
1 Fried Tomato	1 = 12.5 litres.	1 x 12.5 = 12.5 litres.
1 Fried Potato	1 = 25 litres.	1 x 25 = 25 litres.
1/2 punnet mushroom.	454g = 6.8 litres.	1/2 x 6.8 litres = 3.4
1/2 Avocado.	1 = 496 litres.	1/2 of 496 = 248 litres.
4 tbsp vegetable oil.	15 ml = 93 litres.	4 tbsp = 372 litres.
1 glass of Orange Juice.	1 glass = 170 litres.	1 x 170 = 170 litres.
		Total
		1,402.9 litres

Vegetarian Fried Breakfast		
	Water needed to Produce Food	Water Used
2 pieces of toast	1 slice = 40 litres	2 x 40 litres = 80 litres
1 Fried Potato	1 = 25 litres	1 x 25 litres = 25 litres
1 Fried tomato	1 = 12.5 litres	1 x 12.5 litres = 12.5 litres
1/2 Avocado	1 = 496 litres	1/2 x 496 litres = 248 litres
1/2 punnet mushroom	454g = 6.8 litres	1/2 x 6.8 litres = 3.4 litres
4 Tbsp Vegetable Oil	15 ml = 93 litres	4 x 93 litres = 372 litres
1 Glass of Orange Juice	1 Glass x 170 litres	1 x 170 litres = 170 litres
		Total
		910.9 litres

Water Footprint  
of different  
Dietary Breakfasts



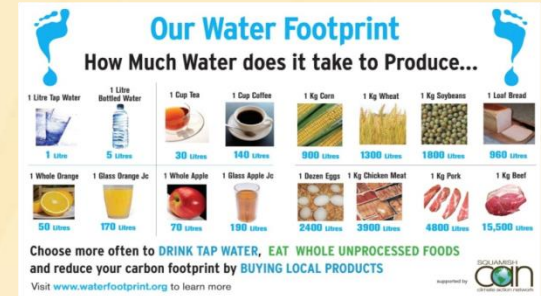


# WE EXPLORED WATER THROUGH TECHNOLOGY



## Research

### How Much Water Does It Take To Produce Food



### Water needed to feed a person

based on USDA dietary guidelines for women aged 14-50 @ choosemyplate.gov

#### Fruits: 1½ cups\*

• Watermelon*	210 c
• Strawberries	400 c
• Apple	500 c
• Grapes	550 c
• Orange	630 c
• Banana	650 c
• Raisins*	1,200 c
• Orange Juice	1,600 c
• Apple Juice	1,800 c
• Mango	1,850 c

#### Grains: 6 ounces\*

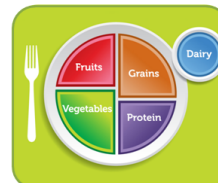
• Potatoes	210 c
• Corn Meal	900 c
• Bread/Pasta	1,300 c
• Oats	1,750 c
• Rice	1,800 c

#### Dairy: 3 cups\*

• Milk	1,800 c
• Yogurt	1,800 c
• Hot Cocoa	2,400 c
• Cheese*	2,800 c
• Soy milk	10,700 c

#### Vegetables: 2½ cups\*

• Spinach*	185 c
• Cabbage	280 c
• Carrots	250 c
• Lettuce*	275 c
• Eggplant	310 c
• Broccoli	315 c
• Cauliflower	330 c
• Tomatoes	350 c
• Cucumber	440 c
• Onion	480 c
• Peppers	500 c
• Green Beans	635 c
• Peas	935 c
• Asparagus	3,025 c



#### Beverages: 8 ounces

• Water	1 c
• Wine	125 c
• Tea	275 c
• Beer	315 c
• Soda	400 c
• Milk	600 c
• Coffee	1,100 c
• Apple Juice	1,200 c

#### Protein: 5 ounces\*

• Chicken	1,325 c
• ToFu	1,500 c
• Beans	1,800 c
• Eggs*	1,900 c
• Fish	2,500 c
• Pork	3,300 c
• Lamb	6,750 c
• Beef	8,500 c

#### Water consumed daily to feed a person in:

• The United States	17,000 c
• The United Kingdom	9,500 c
• China	7,000 c
• Chile	6,250 c

### How Thirsty Is Your Food?



Figures indicate how much water it takes to bring each crop to maturity in the US. If using only irrigated water: Idaho Potatoes, MA and Minnesota, A.C. "Water footprints of domestic crop products (1991-2003)", Art. Naldere, Kuntalidis, Raga Naldere, Ugr. Zakewski/Bluefishhook, Kate Vogel/Neuse Project.

Mother Jones

\* Equivalents based on choosemyplate.gov. Water requirements for various food items and national consumption information found at [waterfootprint.org](http://waterfootprint.org), retrieved January 27, 2012.

# We Researched Different Facts About Water and Displayed Them For The School





# WE EXPLORED WATER THROUGH ART & SONG & FUN

## Recycled Tyre Garden

We used old truck tyres that were going to be dumped and painted them as flower and vegetable planters. We are growing herbs, lettuce and carrots.

We also recycled old planters and pots.



We have buckets to collect rainwater to water our garden when it is sunny!









Our school is near the Lee River so we get to enjoy and explore it.



Don't wanna be a water waster  
Don't want our nation polluting the water  
Can you hear the sound of the taps on  
It's going out to all those polluters

*Welcome to a new kind of tension  
All across our beautiful nation  
When everything is meant to be okay  
Polluted dreams of tomorrow  
Those aren't the ones you're meant to follow  
For that's enough to hurt you.*

Can we all work together  
Saving water for ever and ever  
For the future generations  
Of our wasteful nation

### *Chorus*

Don't be a water waster  
Our planet is sacred and precious  
Our children are the future  
Make sure they all know it

*Welcome to a new kind of tension  
All across our beautiful nation  
When everything is meant to be okay  
Polluted dreams of tomorrow  
Those aren't the ones you're meant to follow  
For that's enough to destroy it all*





# Thank You

