Form a HYPOTHESIS: When observing the surface of planet Earth, does water appear to be an abundant resource? Explain your answer below.

Using the chart below, estimate the amount (percentage) of water that is available to living organisms for consumption.

Water on Earth				
reservoir	percentage of total water (%)			
oceans	96.5400			
groundwater				
saline / brackish groundwater	0.9300			
fresh groundwater	0.7600			
surface water				
icecaps/glaciers	1.7400			
freshwater lakes	0.0070			
saltwater lakes	0.0060			
rivers	0.0002			
other				
permafrost (frozen in the ground)	0.0220			
atmospheric water vapor (clouds)	0.0010			
marshes / wetlands	0.0010			
soil moisture	0.0010			
organisms (living things)	0.0001			

## 5 gallons = 1,280 tablespoons

Calculate the number of tablespoons that represent each water reservoir:

- 1. To convert a percent to a decimal, divide the percent number by 100 or move the decimal two spaces to the left.
- 2. To covert the decimal to tablespoons, multiply the decimal number by total tablespoons.

5 gallons of water			
reservoir	tablespoons		
oceans			
groundwater			
saline / brackish groundwater			
fresh groundwater			
surface water			
icecaps/glaciers			
freshwater lakes			
saltwater lakes			
rivers			
other			
permafrost (frozen in the ground)			
atmospheric water vapor (clouds)			
marshes / wetlands			
soil moisture			
organisms (living things)			

TOTAL

100.0000

TOTAL

## **How Wet is Our Planet?**

What do all living things need to survive?

What kind of water is available for wildlife to consume?

What percent of the Earth's surface is covered by water?

What percent of the water on planet Earth is available for consumption by living things (wildlife and humans)?

How do you think pollution might affect the amount of water available to living things?

After completing this activity, do you think that water is an abundant resource? Explain your answer below.

In what ways do you use water?

What are some ways we can conserve freshwater resources?

## brainstorming space

ANSWER KEY
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reservoir	tablespoons	ROUND 2 tbs	ROUND 3 tbs	ROUND 4 tbs
oceans	1,235.71			
groundwater				
saline / brackish groundwater	11.9040			
fresh groundwater	9.7280	9.7280	9.7280	
surface water				
icecaps/glaciers	22.2720	22.2720		
freshwater lakes	0.0896	0.0896	0.0896	0.0896
saltwater lakes	0.0768			
rivers	0.0026	0.0026	0.0026	0.0026
other				
permafrost (frozen in the ground)	0.2816	0.2816	0.2816	
atmospheric water vapor (clouds)	0.0128	0.0128	0.0128	
marshes / wetlands	0.0128			
soil moisture	0.0128	0.0128	0.0128	
organisms (living things)	0.0013	0.0013	0.0013	0.0013

TOTAL = 5 gallons	1,280	32.4007	10.1287	0.0935 = 25 drops
		tablespoon $\rightarrow$	tablespoon $\rightarrow$	dropper $\rightarrow$
		large cup	small cup	tablespoon

## ANSWER KEY

What percent of the Earth's surface is covered by water? 70%

What do all living things need to survive? Answer includes FRESHwater

What kind of water is available for wildlife to consume? fresh, liquid, surface

What percent of the water on planet Earth is available for consumption by living things (wildlife and humans)? Answers may vary, but should be less than 1%