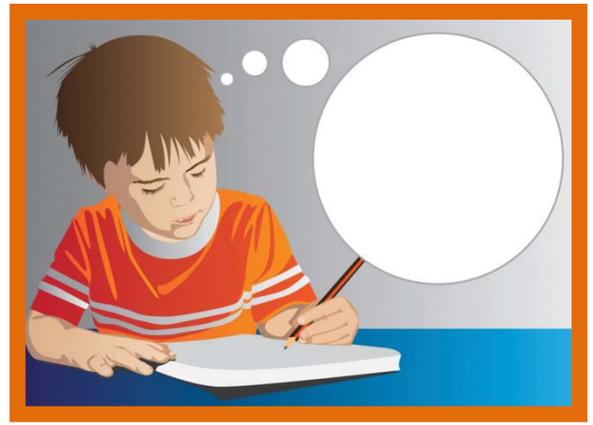


Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Water Use: Initial Reflection

Take a moment and think about how you use water each day. Then list your uses in the following categories.



<b>Essential</b> "I really have to have it."	<b>Important</b> "I have to have it, but I suppose I could live without it."	<b>non-essential</b> "I don't have to have it, but it makes my life more enjoyable."
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

Post Slide Show:

What do you think now? Are there any essential uses of water that you didn't list above that you would like to add? If so, add them to the table below. Are there any other uses that you would like to add, change, or re-order? Make your changes in the table below. Be prepared to explain two of the changes you made, and your reason for making the change or addition to your table.

Essential	Important	non-essential
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

What is a water issue they face in southern Morocco that is also an issue where you live?

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What is a water issue they face in southern Morocco that you do not face where you live?

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In the United States, few of us directly grow or produce our own food. Guess how many gallons it takes to produce the following common food items. Then watch the video clip **Good Transparency: Water Conservation** (<http://www.youtube.com/watch?v=GOLf2RbxmzE>) and fill in the actual amounts.

Arizona Social Studies Standards G4; Strand 4: Geography Concept 5: Environment and Society  
 PO 1. Describe human dependence on the physical environment and natural resources to satisfy basic needs.

	My Guess (in gallons)	Actual Amount
Two eggs		72 gallons
Cereal and milk		22 gallons
16 ounce soad		33 gallons
Hamburger with cheese		672 gallons

The average **per capita** (per person/ per day) use of water in Africa is 47 liters/person/day.

The average **per capital** use of water in the US is 578 liters/person/day.

These numbers include a lot of water uses that we don't think about (the water to grow the food we buy at the store, for example).

and 578 litres/person/day in the US

<http://www.waterindustry.org/Water-Facts/africa-water.htm>

499 gallons/ year water use per capita <http://www.populstat.info/Africa/moroccog.htm>

the average

U.S. consumer uses approximately 700 liters

of water per day. <http://www.waterindustry.org/Water-Facts/africa-water.htm>

## EARTH GROWS, BUT NOT WATER

That's because Earth has the same amount of fresh water now as it did 2,000 years ago when the world population was less than 200 million.

Today, the population in Africa alone is 766 million and that's expected to rise to 1,300 million by 2025. The continent has the fastest population growth rate in the world — 2.4 percent — and the average birth rate is 5.5 children per woman.

On top of that, more than 40 percent of Africa is dry land, while another 27 percent is already desert.

## SCARCITY IN 10 YEARS

And at least five African countries — Kenya, Morocco, Rwanda, Somalia and South Africa — are expected to face water scarcity within the next 10 years, according to a recent report by the U.N. Population

## Water Consumption in Africa

WATER HAS always been a rare commodity in Africa, whose rapidly growing population is now closing on the 800 million mark. And people here are not too fussy — any water, not just safe drinking water, will do to assuage their thirst.

Even in ancient times, African tribes used to fight over two things: water and cattle. History is in danger of repeating itself as today's dwindling water resources may yet become the cause of state wars in the not too distant future.

**Daily water use per capita:** 1,750 gallons North Dakota **Daily water use per capita:** 312 gallons Morocco

**US WORLDd: Connecting People and Communities to ensure a healthy planet** [http://www.prb.org/pdf/northdakota\\_morocco.pdf](http://www.prb.org/pdf/northdakota_morocco.pdf)

Per capita usage in Africa (on average 47 litres/person/day) is also far below that of other countries (85 litres/person/day in Asia, 334 litres/person/day in the UK and 578 litres/person/day in the US) (Hinrichsen and others 1997). <http://www.unep.org/dewa/Africa/publications/aeo-1/149.htm>

Fund. <http://www.waterindustry.org/Water-Facts/africa-water.htm>

The average Briton currently uses 148 litres <http://www.environment-agency.gov.uk/news/114104.aspx>

In 2004 82% of the population of Morocco had access to an [improved water source](#). Specifically, this means that 60.5% of Moroccans had access to piped water in their house or in the yard of their house. For 11% the main source

of water supply was a public stand pipe, for 5.6% it was a protected well. 1.5% of Moroccans, essentially in rural areas, relied on rainwater harvesting as their principal water source. 7% collected water from springs. Half of these springs, supplying 3.5% of the population, were estimated to be protected. All the above sources are considered as [improved water sources](#) by the [WHO](#), thus bringing the total to 82%.<sup>[9]</sup>

18% of the population did not have access to an improved water source. This share is split up as follows: 1%, both in urban and rural areas, used water from tankers as their main water source. 7% collected water from unprotected public wells and 4% from unprotected private wells inside their home or yard. 2.5% took their water directly from rivers and open reservoirs. Another 3.5% were estimated to use an unprotected spring as their main source of water supply, so that in total 18% of the population lacked access to an improved water source.<sup>[9]</sup>

[http://en.wikipedia.org/wiki/Water\\_supply\\_and\\_sanitation\\_in\\_Morocco](http://en.wikipedia.org/wiki/Water_supply_and_sanitation_in_Morocco)