



Lesson Plan Title: **Quantities Pairing Game**

Concept / Topic to Teach: An understanding of the different ways we use water and the quantity of water that each activity uses

Target audience: Primary school students 2nd class upwards

General Goal(s): Water Awareness

Specific Objectives:

- To get the students to realize the variety of different ways we use water and how much we actually use for each activity

Seven Step Link: All

Required Materials:

- 4 sets of laminated colour images of ways we use water
- 4 sets of laminated cards stating quantities
- List for yourself of the quantities and the matching activity

Preparation Level: Low once materials have been made

Students' pre-requisite knowledge and skills: A general idea of measurements i.e. litre. I usually hold up a litre carton to show them its size.



Anticipatory Set (Lead-In): I would usually get the students to carry out this exercise towards the end of a workshop. We would have already have discussed the water cycle, the ways we use water, how much water we use on average per person per day etc... This activity would help make it clearer to students the amount of water we use daily.

Step-By-Step Procedures:

- Divide the class (with the help of the teacher) into 3 or 4 groups.
- Give each group an envelope of pictures and an envelope of quantities.
- Tell them to take them out of the envelopes and spread them out on the table in front of them.



- Explain that they have to match the picture of the activity to the amount of water they think that activity uses.
- Give the class a time limit to work on the exercise e.g. 5 or 10 minutes.
- Once the time is up, ask the groups one at a time how much water they think a bath uses, flushing toilet uses etc...
- If they get it wrong give another group a chance to answer or read out the correct quantity from your sheet.



Closure: Ask them if they were surprised by any of the quantities of water? Ask them would knowing how much water each activity uses make them think twice before carrying out that activity again? Ask them how they could reduce some of the quantities of water used in some of the activities.

Adaptations for students with learning difficulties:

Extensions (for gifted students)

If a group are finished early ask them to think up ways of reducing the quantity of water used in some activities in the exercise.

Links to other subjects

English:

Receptiveness to Language

Reading

Developing competence and confidence in using oral language.

Developing cognitive abilities through language.

Emotional and imaginative development through language.

Geography:

Geographical investigation skills- questioning, observing, predicting, estimating and measuring, analyzing and communicating.

Human environments.

Natural environments.

Environmental awareness and care.



Science:

Working scientifically- questioning, observing, predicting, estimating and measuring, analyzing (sorting and classifying) and communicating.

Designing and making- exploring, planning, making and evaluating.

Living things.

Materials- properties and characteristics of materials.

Environmental Awareness and care.

Visual Arts:

Concepts- an awareness of shape, form, texture etc...

Construction- making constructions.

Physical Education:


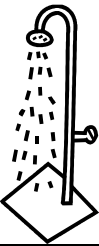

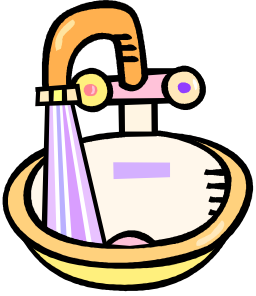

Aquatics- water safety, buoyancy, understanding and appreciation of aquatics.

Social, Personal and Health Education:


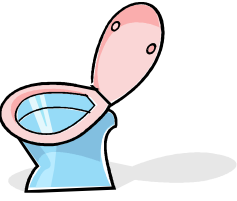

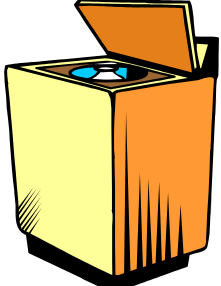

Myself- Developing self-confidence, making decisions, safety and protection.

Myself and the wider world- environmental care



Bath 	80 litres
5 Minute Shower 	35 litres
Power Shower 	125 litres in less than 5 minutes!
Brushing Teeth with tap running 	6 litres per minute
Brushing Teeth with tap off 	1 litre



<p>W.C. flush standard</p> 	<p>9 litres</p>
<p>W.C. Flush modern</p> 	<p>6 litres</p>
<p>Washing machine modern</p> 	<p>45 litres</p>
<p>Washing machine</p> 	<p>65 litres</p>
<p>Dishwasher 20 litres</p> 	<p>20 litres</p>



Hosepipe



9 litres

Washing car with Bucket



10 litres