SCHOOL WATER AUDIT

TEACHERS' INFORMATION

The Water Audit Software is designed to provide you and your class with support materials to:

- Plan and carry out an estimated water audit of your school.
- Carry out a 'measured' water audit using water meter readings for a one week period if possible.

IN A NUTSHELL!

- Introduce the idea of a water audit to the class.
- Decide together how you will find and record the information.
- Take children out of the classroom around the school and collect the information required.
- Input your data as a whole-class exercise.
- Analyse the data using the software and print out a summary sheet.
- This audit may be repeated as required

The software is designed to be used with an interactive whiteboard or data projector, with the teacher leading the sessions. There is no need to input any information using a keyboard, simply use the 'stepper' to increase or decrease a number. However, if you have access to a keyboard (real or on-screen) you can type in a number in the usual way. The 'measured' section requires the keyboard to input the meter readings.

The suggested approach encourages the children to come up with their own ideas for estimating the school's water use.

There are three sections which are completed in order.

GETTING READY

The children decide how they are going to collect and record all the information.

WATER SURVEY

The children go out of the classroom, collecting information on water-using items around the school. Back in the classroom the basic data on the number and type of water-using items is input.

RESULTS

The detailed information is input and analysed by the software.

Saving Information

If you run out of time and have to leave the program before you have completed a section the software will retain the information you have completed allowing you to continue where you left off when you return.

GETTING READY

The aim of this section is to get the children to think about:

What?

What is meant by the word audit? What is water used for? Which items use water in the school?

Relevant prompts have been hidden which will appear on-screen. Challenge the children to answer the questions.

Where?

The idea here is to get the children to come up with the location of water-using items around the school – classrooms, toilets (boys, girls or adults), school kitchen, staffroom, outside, cleaner store or 'Others'.

Who?

Again, investigate who uses water in the school.

How much?

This section is key to the success of the estimated water audit and gets the children thinking about how they can estimate the water used by various appliances.

Hopefully the children will come up with ideas such as putting the plug in a sink and washing their hands under the tap and then 'bailing out' the sink into a container of known volume. Running a tap for a set time and catching and measuring the water. Looking into a cistern if possible. Interviewing the Site Manager / Caretaker.

The children will have to come up with a way of estimating how much water is used each day by the various water-using items.

We have deliberately not provided figures for how much each of the water items uses because we would like the children to try to work this out for themselves.
It is important that pupils have an understanding of the basic unit for measuring the volume of water – the litre. All children are familiar with the 1.5 litre 'standard' pop bottle and these can be easily modified to become one litre measures.

Pour the contents of a one litre measuring jug into an empty plastic bottle and mark the litre level on the bottle. You may need a number of these.

Another useful measure is the 'bucketful'. The number of litres in a bucketful is easily measured by filling the bucket using the litre measures mentioned above.

Encourage the children to use any water they measure wisely by watering plants with it or add it to the waterbutt outside!

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WATER SURVEY

It is entirely up to you how you organise the collection of the information but the first thing you will need to know is exactly how many of each water-using item there are in the school. Depending on the support staff available you may wish to take the whole class together or split the children into groups with their own area to survey.

The opening screen shows most of the water-related items which are likely to have been found in your school.

If the class found that item, drag it into the school outline at the top of the screen and input the total number found when the children surveyed the school. All are water-using items, apart from the waterbutt which saves water.

Some of the items use a set amount of water with each use, for example a toilet. Others, such as a wash basin, depends on the duration the item is used for.

We have included an icon for 'Others' which may be used for any item you found which does not appear on the screen, for example, the decorative fountain in the Head's office.

RESULTS

Is sub-divided into two sections:

- **Estimated**
- **Measured**

Selecting 'estimated' continues the process from the Water Survey, allowing you to input details about the items, their location and the estimated amount of water they use.

Selecting 'measured' takes the user to the section where water meter readings may be input and analysed by the software, providing an accurate picture of water use in the school.

Summary screens which summarise all the information input may be printed out.

1 – Estimated

The items you found will be shown at the bottom of the screen. Any items you did not find are shown with a large red cross through them.

Select an item from the bottom line.
Choose a location where at least one of those items was found.
Fill in all the selection boxes for that location.

PLEASE NOTE:
All values refer to daily usage.

Because some toilets, basins etc are used more than others during the day (often the first basin or toilet gets more use) you are asked to input the total number of times that ALL these items are used.

For example:
If there are 3 toilets in the boys and the survey shows that during one day the first toilet is used 25 times, the second one 14 times and the third one 7 times, the total number of uses for this item will be 46 times.

RESULTS continued

Similarly, if there are two showers in the girls and the first one is used for 30 minutes and the second one is used for 20 minutes, the total number of minutes this item is used for will be 50 minutes.

Repeat for other places where that item was found.
When information on all the items found during the Water Survey has been input a green tick appears over the item.

Do the same for all the items you found.

Select **'Done'** when everything has been recorded.

You will now see the Summary Screen showing your estimated daily water use and the weekly estimate. You are also asked to add the weekend estimate. Again this can be discussed with the children.

Select **'Print'** to obtain a summary table of all the information you have input.

You can submit this for the 'water' key environmental topic of the Eco-Schools Programme.

2 – Measured

This section should be completed if you are able to access your water meter readings. Your site Manager/ Caretaker should be able to support you.

The school's water meter readings are taken daily over a typical term-time week. The software then analyses the data and provides you with a print out, including a graph showing the week's water consumption.

You need to take readings at the same time every day, ideally first thing in the morning, apart from Friday when you need to take two readings a.m. and p.m.

Start: Monday   a.m.
Tuesday   a.m.
Wednesday   a.m.
Thursday   a.m.
Friday   a.m.
Friday   p.m. end of the school day
Final: Monday   a.m.

It may be easier to collect all the meter readings for the entire week and enter them in one session rather than entering the readings on a daily basis. If you do wish to enter them every day the data is saved on your computer between sessions automatically.

The weekend consumption is the volume of water used from Friday p.m. to the final reading on the second Monday morning.

If you would like to respect the process at a later date to see whether your water saving efforts have been successful, use the **'Reset'** button to remove the initial week's data. Make sure that you have printed the readings first!