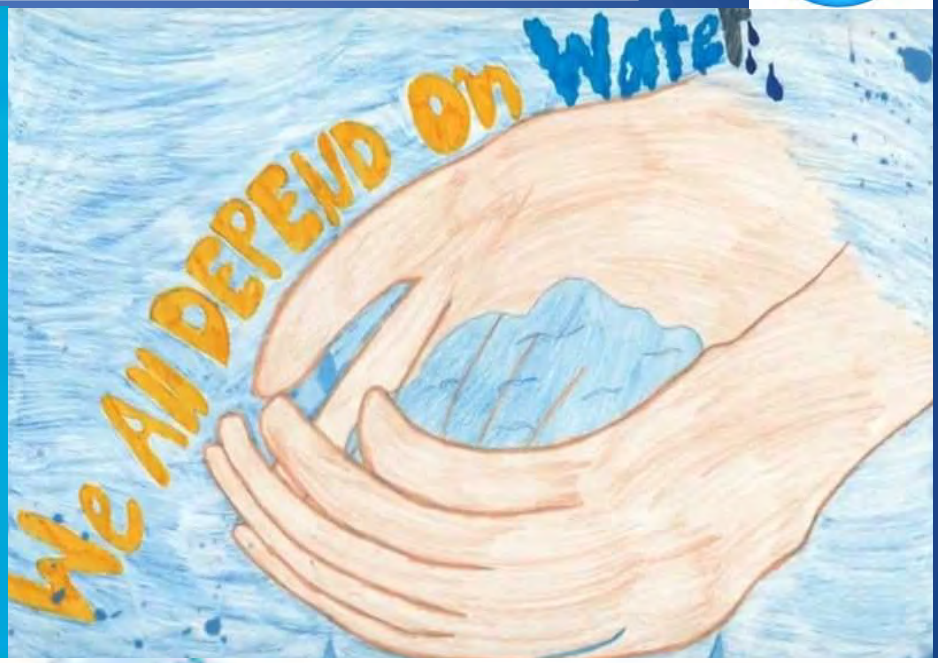
4 MINUTE SHOWER POWER!!



Why save water?

- *Saving water is extremely vital.*

- *In the world only 1% of our water is useable. The rest is salt water in the ocean or frozen making it difficult to use.*

- *We must use this limited resource wisely!*

- We have been actively involved in a water saving project by H20 Heroes.

- We created our own campaign called:

‘4 MINUTE SHOWER POWER!’


4 Mins
2
Shower
Power

First of All.....

- ***When we started our campaign, we had many interesting ideas so we had several brain storming sessions.***
- ***We had to decide on a name for our campaign which was not easy but we got there in the end!***
- ***Combining our ideas and planning our campaign was hard work but we all worked as a team.***
- ***We were determined to engage as many students as possible to make a positive change in their behaviour.***

The Science behind it all!

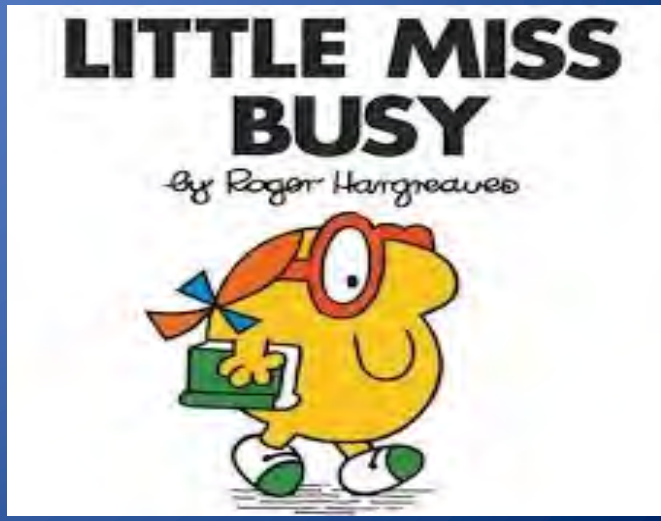
- **Aim:** To find out if students can save water by changing their behaviour.

- **Hypothesis**: I think that if students are made aware of the benefits of saving water then they will be motivated to change their behaviour . Behaviour change will be demonstrated when students write pledges and collect and use 4 –minute shower timers. I think so because the average 8-minute shower uses about 62 litres of water while a 4-minute shower with an efficient shower head uses just about 32 litres of water.

The Science behind it all!

- **Apparatus:**

✓ Surveys
✓ Power point presentations
✓ Pledge Tree
✓ Pledge leaves
✓ 4-Minute Shower Timers
✓ Computers
✓ Notice Boards



Variables

Independent variable: (We changed)

- ✓ Surveys given out before and after the Assembly presented to Year: 7 students.

Dependent Variables: (We measured)

- ✓ Number of pledge leaves completed.
- ✓ Number of Year: 7 students who completed the surveys.
- ✓ Number of students who collected the 4-minute shower timers.

Controlled Variable: (We kept the same)

- ✓ Information presented to students in the Year: 7 Assembly.

Experimental/Research Design

Step: 1- Brainstormed ideas in the group.

Step: 2-Designed a campaign title then allocated tasks within the group.

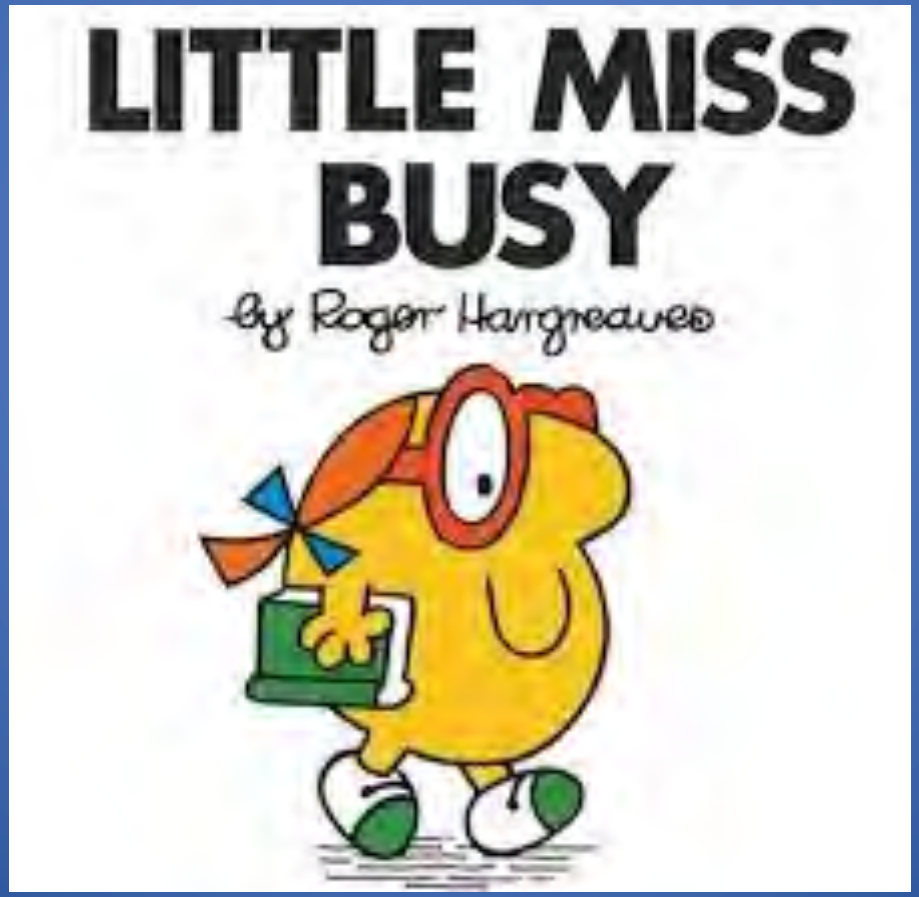
Step: 3- Prepared a power point then arranged to present the campaign to 270 Year: 7 students.

Step: 4 -Designed a Pledge Tree with Pledge Leaves.

Step: 5- Prepared and gave out pre and post surveys to 270 Year: 7 students.

Step: 6- Collected the surveys that students completed daily then collated the results.

Gathering the Data



THE ASSEMBLY!

- Our next step was to present our assembly to Year: 7 pupils. The aim was to make them aware of our goals, get them engaged in our campaign and ultimately initiate a change in behaviour.

- We presented information explaining:

✓ why saving water is important,

✓ how students could contribute to saving water and, about our pledge tree.


F06
Ms English's
Room
South Side


SCIENCE
SCIENCE
SCIENCE

How did we Measure Impact?

This is our autumn pledge tree waiting for the summer (pledge leaves to be stuck on)

- The most important part of our campaign was to measure impact to see if our campaign worked!
- So we gave out surveys to classes before and after the Year: 7 Assembly then collated the results.
- Next came designing our pledge tree . This was the most enjoyable part of our campaign!

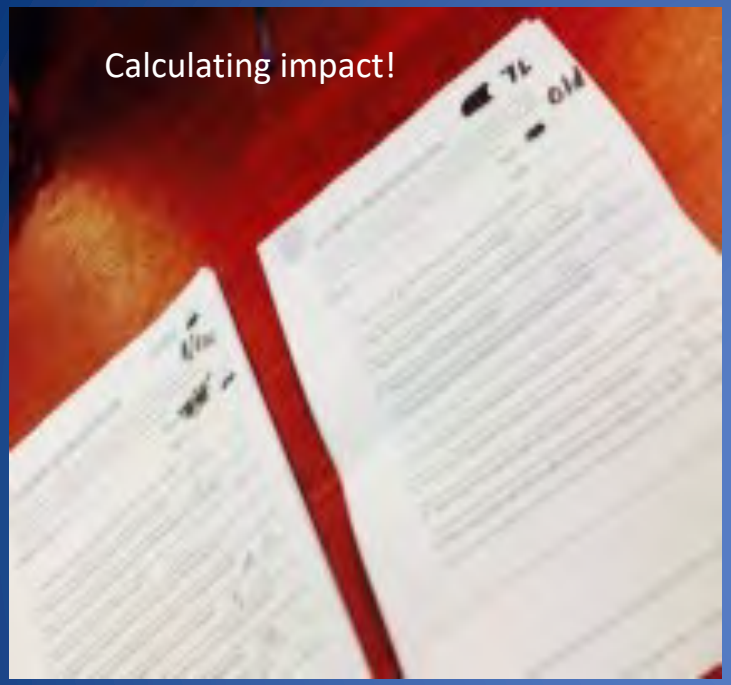
F06

Ms English's Room

South Side


Notice
Notice
oard
Pick up a pledge leaf from FO6
stem clubs
stem clubs
stem clubs
stem clubs

Measuring impact!



❑ After informing people about our campaign and ways people could get involved, we allowed a few days for people to sign pledge leaves and collect 4 minute shower timers.

❑ We then sent out second surveys and collected them. Next, we calculated how many more people saved water through various different acts such as turning the tap of while brushing and taking short showers and the results were impressive!

Interpretation

We presented our campaign to the Year: 7 assembly – to approximately 270 students. During the assembly we explained why it was important to save water. Our results showed that we reached over 270 students and we were able to initiate a change in behaviour in over 160 students. In addition, over 120 students collected 4-minute shower timers. This demonstrated that our campaign was successful and we were able to convince students to conserve water by using less water .

We collected data by making our own Pledge Tree that we placed on our STEM Club Notice Board. Students who walked by our Pledge Tree read the pledges of other students and they also got involved and collected 4 minute shower timers. All the students who participated in our campaign demonstrated that they wanted to do their part in conserving water. Every little bit helps because the effects will not only be felt in our country but will spill over to other countries as well.

Interpretation- Calculations

- *The average 4 minute shower uses about 32 litres per head*
- *120 people collected the shower timer to take the 4 minute shower and signed with conformation. That is 120 x 32 =3,840 litres*
- *3,840 x 0.3441 (g CO_2 e)= 1,321.344 g CO_2 e -water supply*
- *3840 x 0.7085 = 2,727.725 g CO_2 e – water emissions*
- *1,321.344 + 2,727.725 = 4049.069 g CO_2 e – water emissions and treatment together*
- *For 3840 litres of water saved, 4049.069 CO_2 saved too!!!*

Conclusion

- Our results showed that after 1 week of the launch of the campaign approximately 160 students had written pledges and placed them on the Pledge Tree. Over 120 students demonstrated that they wanted to change their behaviour and conserve water by collecting and using a 4-minute shower timer.


4 Mins
2
Shower
Power

Group: 1 Members

1. Iqra
2. Noshi
3. Gullnoor
4. Nisha
5. Samira
6. Madhunesha
7. Wahida
8. Fatema
9. Arundhathi
10. Midurnna
11. Fatima
12. Jashandeep