

I need water every day

Focus

Our bodies are made up mostly of water. Water content of children aged between five to seven years is about 70%; adults about 50-65%. Our bodies lose 3-3.5 litres of water a day; more if it is hot or when we exercise. An average person can survive less than a week without a drink of water. So, how much should we drink every day? Students monitor how much they individually drink in a day/week (in cups). (This can be extended to their family)

a) How many cups do I need to drink?

Materials: *You will need (per group)*

- several different drinking containers
- measuring jug
- survey sheet

Procedure

- Work out how many cups in one litre; and in 3.5L using common drink containers use a standard cup, either a plastic cup used on bottled water dispensers (100ml), or mug (200-250ml).
- Ask students to work out ways to measure the amount of water in each container
- Suggest they record how many millilitres and/or cups in each container
- Ask students to share their findings with their classmates
- Ask questions of the class to elicit the best way to measure 3.5 litres eg. Why are there different answers even though we used the same containers? How could we have done this more accurately?

b) Am I drinking enough water?

Materials

- Standardised cup (marked on outside with amount in mls)
- Recording sheet (to be designed)
- Temperature readings (weather report or class thermometer)

Procedure

- Working in groups, design a method of determining how much (in cups) each person drinks in the next week.
- Design a recording sheet to keep the information (See Sample recording sheet)
- When discussing the design, ask students to think about:
 - The size of the cup
 - The sort of drink they had (milk, juice, water, soft drink)
 - The weather (hot, warm, cool, cold)
 - The food they ate (dry, juicy)
 - Any other factors they think might be important
- Allow one week for keeping a record. This gives opportunity to get 2-3 days of reliable data.
- Ask each student to calculate the number of cups of fluid they drank for each day recorded and work out mls/day.
- Guide the analysis but use small groups of students to allow them to help each other sort the data.
- Provide guide questions to assist the process

Input concept: *We should drink 6-8 glasses per day of water.* And ask how this scientific idea compares to what most people in the class do. What differences are there between how much we should really drink and the amount we actually drink? Why might this be so?

Conclusion

- How could we show our new understanding? Ask students to work in groups to work out how to show how much water we need to drink every day and construct a 'model' to do this eg. poster, diagram, graph, or cartoon.
- Share with the school community as a show and tell on assembly.