

Living things need water

Focus

Water is a component of our physical environment; water is found in various places in our environment, even inside living things. Living things need water; plants 'drink' (take in water) through their roots; animals drink via their mouths. Students investigate 'Where did that water come from?'

Preparation

Explore prior ideas through questioning

Blow onto a mirror or spoon, and ask the students what do they see? Can they identify what it is?

- Q Where did that water come from?
- Q Do other living things 'breathe out' water?
- Q How much water would we breathe out each day?
- Q Could we 'dry out'? Do you ever get a really dry mouth? What might happen if we did?
- Q What about plants? Do they ever dry out? What happens to them?

Procedure **NB ACTIVITIES NEED TO BE STRICTLY SUPERVISED**

- Using a plastic bag try each of these methods.
 - plastic bag tied over a small branch of a shrub for a day. Remove at end of day.
 - plastic bag enclosing a child's hand during a physical activity; remove immediately after activity.
 - blow into the plastic bag and tie up tightly eg. A balloon (strictly supervise)
- Remove bags and tie tightly.
- Leave bags overnight in a cool spot and check the next day for contents of bag/balloon.

Discussion of findings

- Q What did you discover?
- Q What other questions do you have?
- Check answers from preparation discussion to direct thinking and assist students to design simple experiments.

Students' Investigations: (some suggestions)

- Different people doing less and more activity; or for longer periods of time.
- Care of seedlings in three different pots using varying amounts of water.
- Caring for plants with or without a covering 'lid'. (Lid would need to be clear) Test the need for water by comparing how long the plants can go without water before wilting.

Evaluation/Review of findings

- Group reporting of results of their investigations to the class; using tables of recorded observations, photos, actual experimental material (eg. plants)
- Compare students' understanding with scientific view; open discussion using evidence from experiments.

Challenge

- Q How do we get more water if we run out of water?
- Q Where does it come from?