Interdependence loopy

Playing this game assesses your knowledge of how different things in or near a waterway affect each other. It also checks if you know some of the special science words you need to be able to communicate your ideas about what affects waterways.

The aims of this game are:

- to reinforce some of the relationships present within waterways; and
- to reinforce vocabulary.

This is an adaptation of a game often played in maths so is likely to be familiar to teachers and students.

How to play:

- Deal out all the cards.
- Choose a student to start. That student reads out the statement in italics on the bottom half of a card. Whoever has the phrase that completes that sentence on the top half of their card reads it and then the statement in italics on the bottom of the card.

plants that grow on river banks. When bare soil is washed into rivers it muddies	the water. Mud in the water

- It could be that more than one student holds a card that could complete the sentence on the first card. In this case choose the most sensible answer, looking at the grammar too. The game continues in this way until all the cards are used. If each card is laid correctly the last statement used will be the statement on the top half of the first student's card.

Variations

- Initially it may be better to play this game with a group of about 10 students with 3 cards each rather than the whole class. If the students sit in a circle and put their cards on the floor in front of them they can help each other find the correct card. The focus should be on using all the cards.
- As the students become familiar with the game it could be timed to see how quickly the class can complete the game. In this version each student has one card.

to make its own food. Clean water is vital	smother the habitat. Algae is the main food of	temperature can affect stream life. Too many nutrients coming into the stream can
for healthy ecosystems. Waterways	most aquatic insects. Petrol, paint or detergents can get into waterways	large water source underground. Percolation is
support plants and animals. Mayfly, stonefly and	via stormwater drains. In the water cycle water moves from the surface of Earth	water moving downwards through openings in the soil and rock. Water shed is the area of land drained
caddisfly larvae usually live in clean water. Snails, fly larvae and worms can tolerate	to the air and back to the surface of the Earth again. Introduced species of	by a river and the streams that run into it (its tributaries). Algae uses energy from the sun
muddier, warmer water. Headwaters of streams are usually cleaner	fish can damage our waterways in lots of different ways. Cold fast flowing water carries more	than lowland waterways. Stock such as cattle can kill
shade that helps keep water cool. A small change in water	water vapour becomes a liquid. Surface run off is water that	plants that grow on river banks. When bare soil is washed into rivers it muddies
the water. Mud in the water	that feed on aquatic insects. Evaporation is the process where	Can kill plants and animals that live in rivers. Roots of trees growing beside rivers stabilise
runs along the ground and goes into lakes and rivers. Precipitation is	rain, snow, sleet or hail. Groundwater is	water under the ground, as in a spring or well. Aquifer is a
make algae grow too much. When algae grow too much they can	oxygen than warmer, slow moving water. Mayflies and stoneflies breathe under water so	they need to live in places with lots of oxygen in the water. Kingfishers eat small fish
liquid water becomes a gas. Water vapour is	banks and give insects and fish places to hide. Trees growing on river banks provide	water as gas in the air. Condensation is the process where