

Approach: Team

Year: 4 & 8

Focus: Explaining properties of gas

Resources: 2 plastic glasses, *Working Together* team guide, lemonade, 12 currants, team answer sheet, 2 sample cups

**Questions / instructions:**

**Preparation:** Put a glass in front of each pair of students. Half fill the glasses with lemonade.

**Discuss *Working Together* Team Guide.**

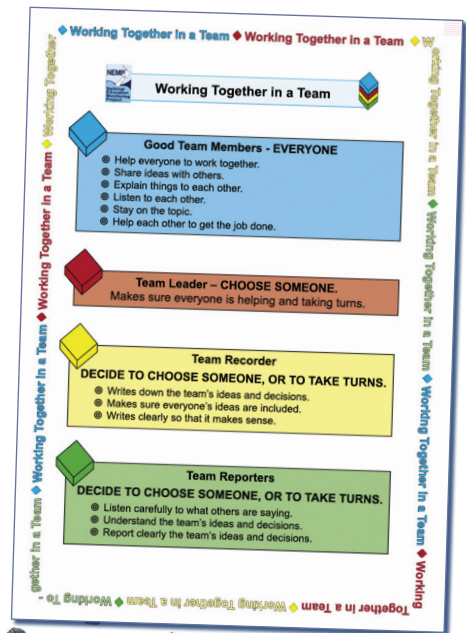
In this activity you are going to watch what happens when you put currants into lemonade. So that you can easily see the currants I have set up two glasses of lemonade. [Student 1] and [Student 2] can watch this glass and [Student 3] and [Student 4] can watch this glass. Look carefully from the top as you drop in six currants. Keep watching to see what the currants do, and talk about why they are moving.

**Hand pairs of students six currants to drop into the lemonade. Allow time.**

Now as a team you are going to talk about the questions on this sheet [*same as below*] and listen carefully to each other's ideas. Then you will write down your team's ideas.

**Hand out answer sheet and read questions to the students. Allow time.**

Now tell me the answers you have decided for the questions.



	% response 2007 ('03)			% response 2007 ('03)	
	year 4	year 8		year 4	year 8
Why do the currants start to go to the top?					
carbon dioxide/gas/bubbles/air					
attach to currants	18 (17)	28 (42)			
these bubbles etc. help to lift					
(currants to surface)	53 (50)	64 (64)			
Why do the currants then sink to the bottom?			<b>Total score:</b>	5	0 (0)    6 (7)
bubbles etc. pop	41 (40)	63 (56)		4	3 (5)    13 (13)
less/no bubbles etc. to make currants float	20 (15)	32 (27)		3	19 (13)    28 (22)
What are the bubbles made of?				2	20 (22)    18 (24)
carbon dioxide	6 (10)	37 (32)		1	28 (28)    22 (20)
				0	30 (32)    13 (14)

**Commentary:**

Because this was a team task, no graph of subgroup performance is possible. There was substantial improvement from year 4 to year 8, and no meaningful change in performance at either year level between 2003 and 2007.