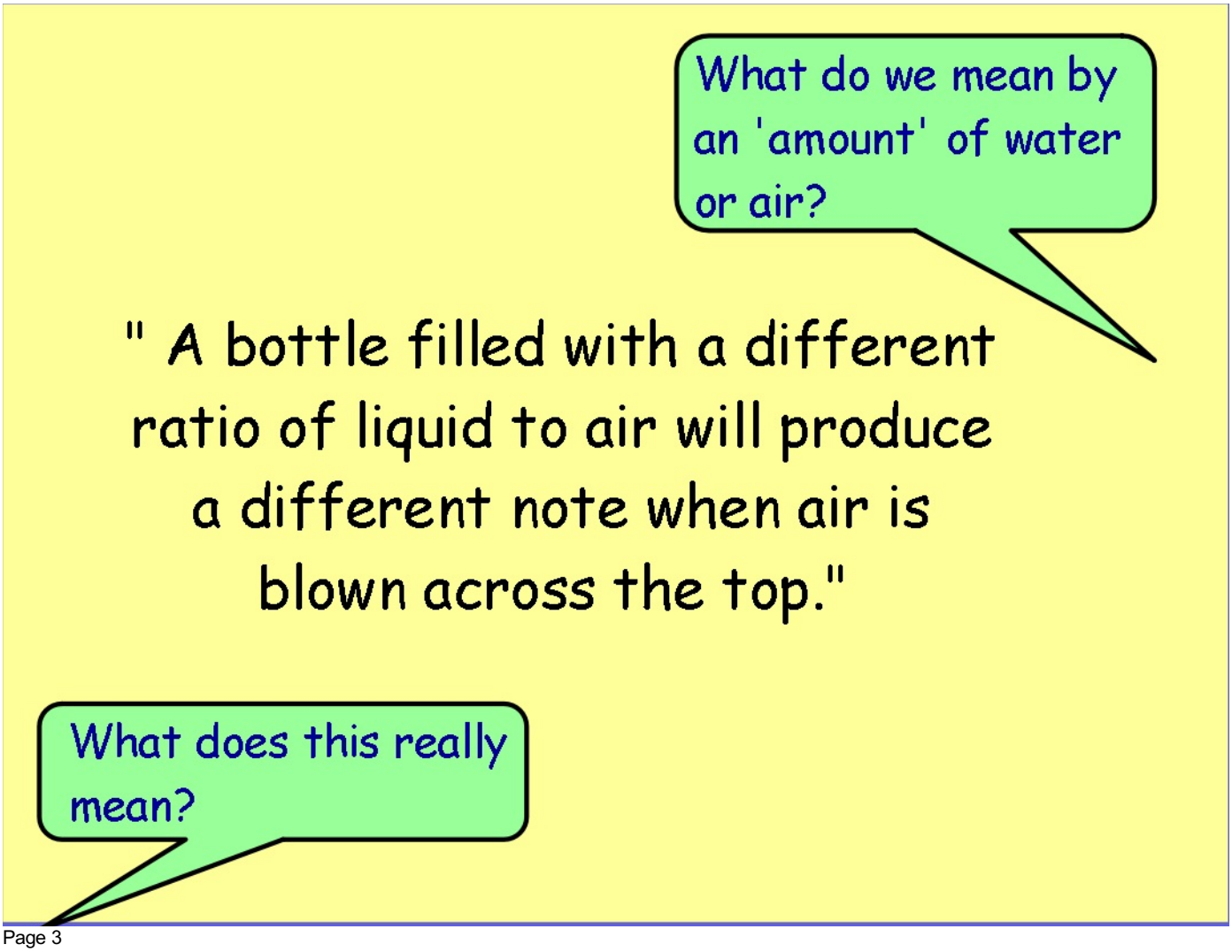
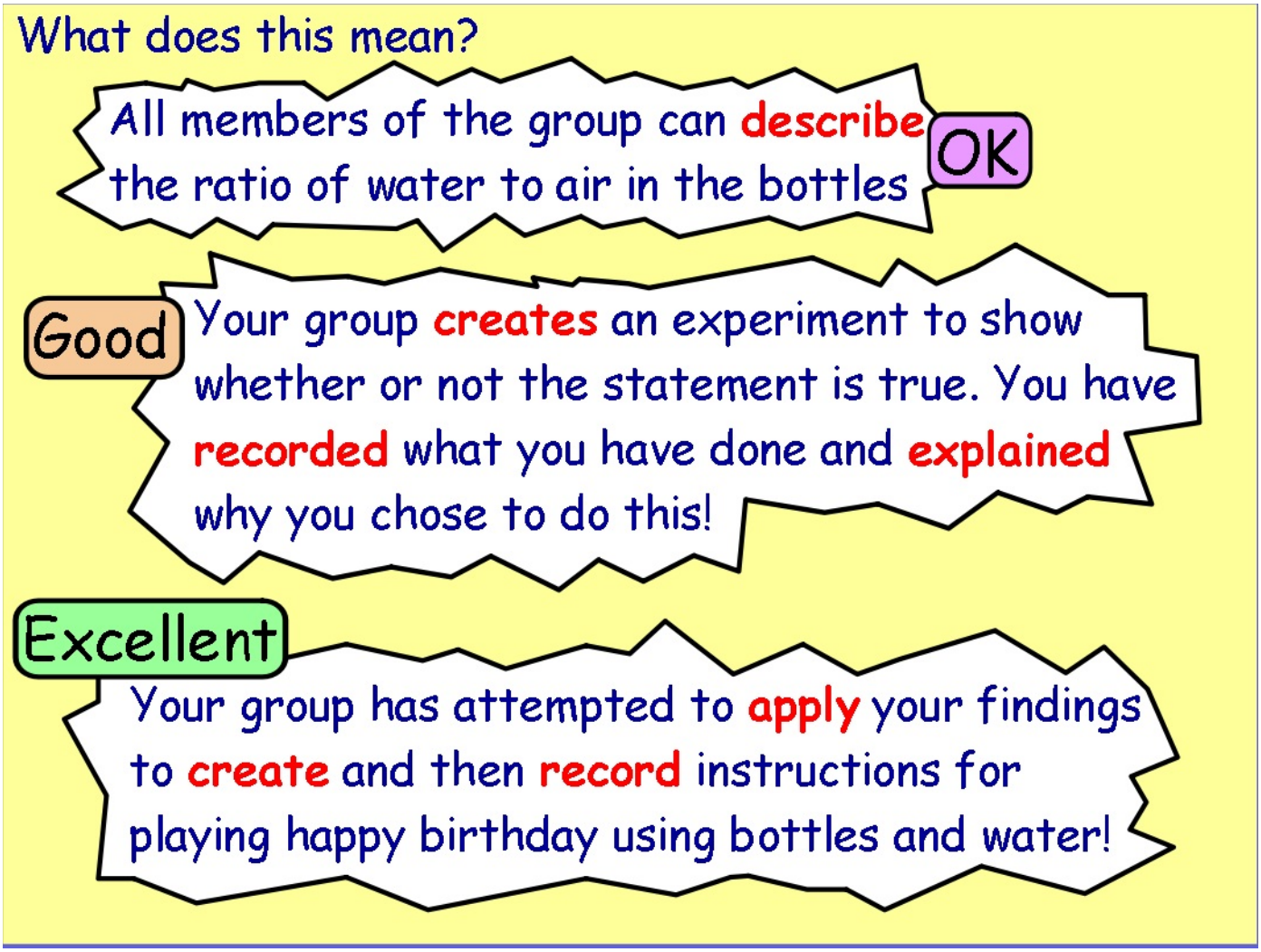
L.O: Understand how to use and apply ratio to describe a 'real' situation

http://www.youtube.com/watch?v=3ZtBeiGO5MA

http://www.youtube.com/watch?v=BnWYPMKRZhw

" A bottle filled with a different ratio of liquid to air will produce a different note when air is blown across the top."

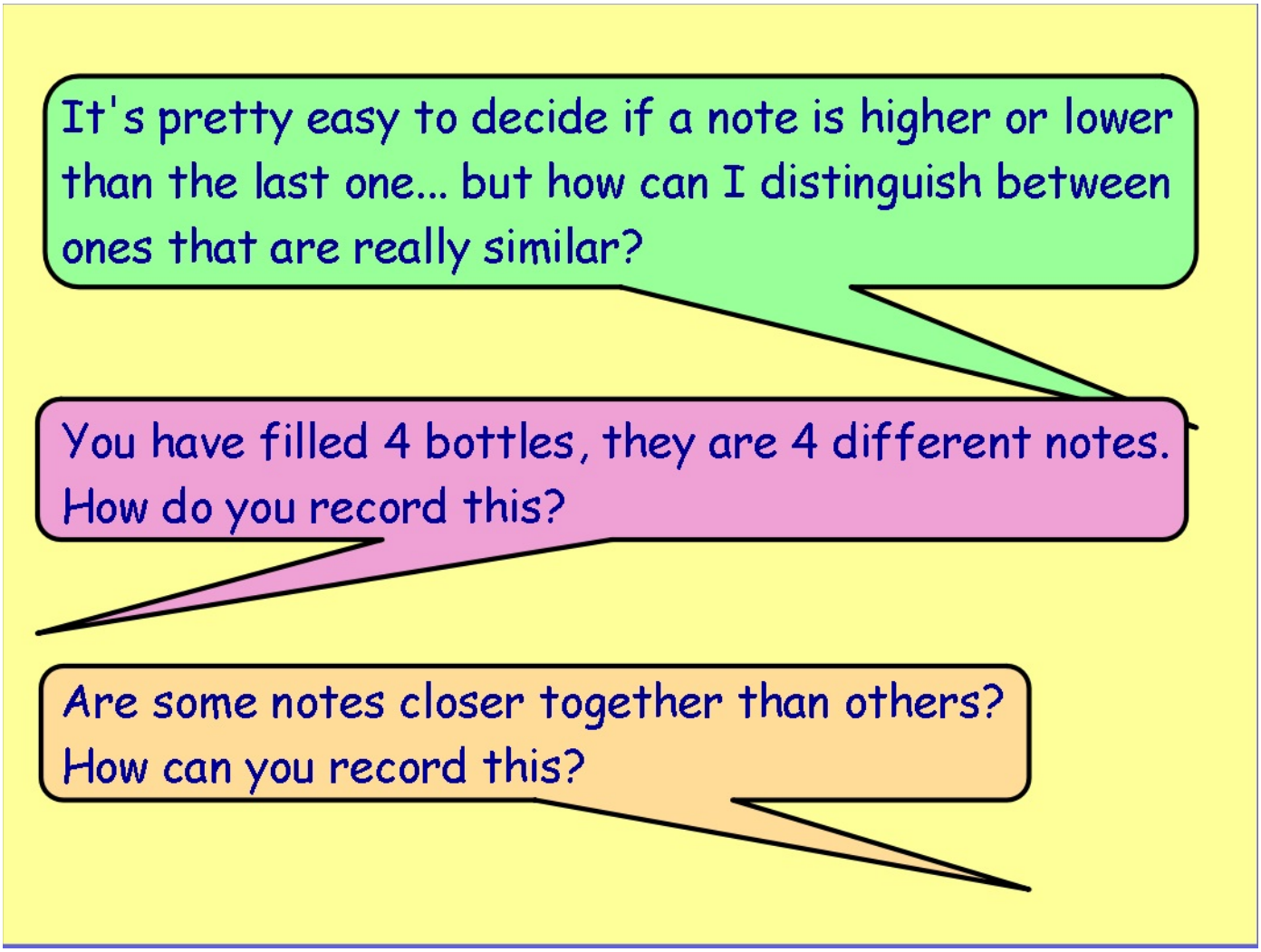

What do we mean by an 'amount' of water or air?
" A bottle filled with a different ratio of liquid to air will produce a different note when air is blown across the top."
What does this really mean?


What does this mean?
All members of the group can describe the ratio of water to air in the bottles
OK
Good
Your group creates an experiment to show whether or not the statement is true. You have recorded what you have done and explained why you chose to do this!
Excellent
Your group has attempted to apply your findings to create and then record instructions for playing happy birthday using bottles and water!

You fill some bottles with different amounts of water... how are you going to record what you find out about these?

A table?
A list?
Labelled diagrams?

Are you describing the ratio of the **height** of water to air or the **volume** of water to air?


It's pretty easy to decide if a note is higher or lower than the last one... but how can I distinguish between ones that are really similar?
You have filled 4 bottles, they are 4 different notes. How do you record this?
Are some notes closer together than others? How can you record this?

You manage to create a tune... how can you record it so that another group could perform it (without talking to you?)

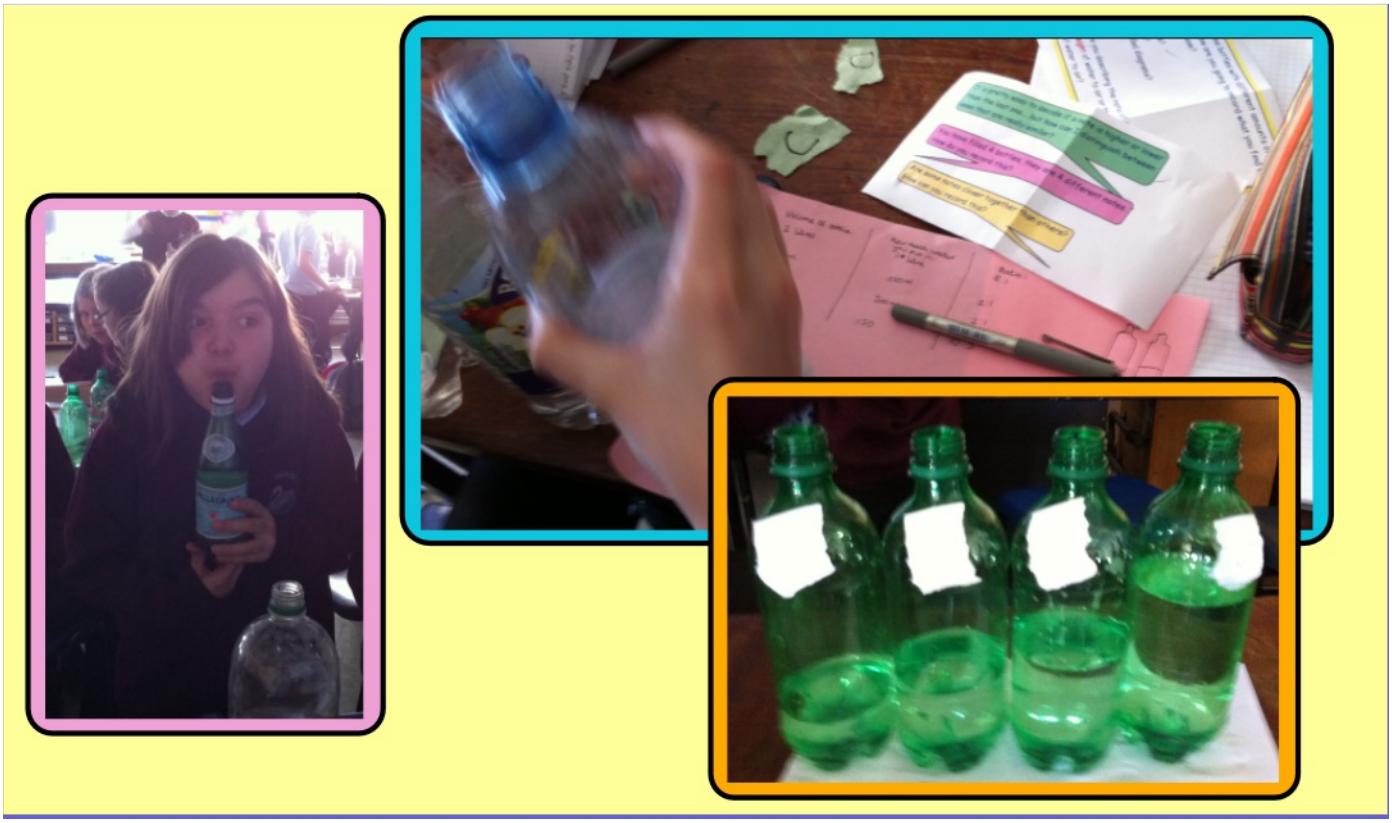
Key questions to sum up...

Why is there still water on your desks?!

What is the relationship between the ratio of air to water and the pitch of the note created?

How did you record your findings?

What was challenging about this investigation?




B = 600ml
F = 125ml