

First Name	Last Name	BIOCK DDD	Date	
Group Members (if applicable)		Assignment Title Investigating Air La		

Warm Up-Anticipation Guide: Air			
Before	After	Question Directions: Mark if you agree (+) or disagree (—)	
		1. Air is made up of nothing.	
		2. It can be hard to compress the air in a small container, such as a plastic syringe.	
		3. The air that I breathe out is the same as the air that I breathe in.	
		4. Wind is the movement of air.	

Background Research: Composition of Air		
Gas	Inhaled Air	Exhaled Air
Nitrogen	78%	78%
Oxygen	21%	16%
Carbon Dioxide	0.04%	4%
Water Vapor and other <u>trace</u> (small amount) gases	1%	2%

Steps of the Scientific Method				
1. State the Problem				
2. Hypothesis	Independent Variable-(X-axis) (I can change this!) Dependent Variable-(Y-axis) (stays constant)	IF		
	Control	Materials: GOGGLES! 1 dropper bottle of BTB (Bromthymol Blue) indicator liquid, 1 cup of water, 1 plastic syringe, 1 SEPUP tray, 1 stir stick		
40	Procedures (list steps)			
3. Experiment	 Observe the air around you. Think about color and odor. Refer to Lab 63: Investigating Air procedures 1-20 on pages on E-67 and E-68. 			

4.	Air Investigations			
-	Air Investigations: Table A: What is air? Observations			
Record and		ervations		
Analyze	Observing air			
(draw tables/charts to record data in				
this space)	Air on my arm			
	Holding the tip tightly			
	Holding and releasing the tip			
	Table B: Is Air Always the Sam	e? Initial Color Final Color		
	Control (Cup A)	C. Initial Color That Color		
	Classroom air (Cup B)			
	Air from lungs (Cup C)			
Analysis	How can you describe air?			
Questions	How can you describe an?			
	Is air always the same?			
	Look at Table A above, would you change			
	any of your answers? How?			
	Do your observations from part A provide			
	evidence that air is a substance? Why or why			
	not? Look at your results from Part B. Is the air			
	that comes out of your lungs the same as you	r		
	classroom air? Explain.			
	Is air a substance or is it just empty space?			
	Support your answer with evidence from this			
_	investigation.			
5.	Did your data support or refute your hypothesis?			
Conclusion	your hypothesis:			
	What would you do to improve			
	the experiment in the future?			
	What did you learn about this			
	topic?			
I				

Lab 63



Gators
Investigating
Air