EXPLORING SCIENCE WORKING SCIENTIFICALLY

Name

Class _____

Date _____

Draw a ring around a number of stars for each statement. If you are very confident about a statement, draw your ring around all the stars. If you do not know anything about a statement do not draw a ring.

Торіс	At the end of the unit:	
8la		
	Describe the properties of the three states of matter and explain them using ideas about particles.	* * * * *
	Describe how particles move in solids, liquids and gases, how this changes with temperature and what effects this has.	* * * * *
	Explain what density is.	* * * * *
8la Working Scientifically		
	Use a formula to calculate density.	* * * * *
	Use the particle model to explain density changes at different temperatures.	* * * * *
	Describe how to measure the volume of regular and irregular objects.	* * * * *
8lb		
	Explain how chemical changes are different to physical changes, and recall some examples of each type.	* * * * *
	Recall that ice is less dense than water, and why this is unusual.	* * * * *
	Describe what happens to particles during changes of state, in terms of energy and bonds, and why there is no change in temperature while a substance is changing state.	* * * * *
8lc		
	Use the particle model to describe the causes of pressure in fluids.	* * * * *
	Explain why pressure in a fluid increases with depth.	* * * * *
	Explain some effects caused by fluid pressure using ideas about forces.	* * * * *
	Use the particle model to explain why gas pressure changes with temperature, number of particles and volume.	* * * * *
8ld		
	Use the idea of upthrust to explain why an object does or does not float.	* * * * *
	Recall the factors that affect the amount of upthrust on an object.	* * * * *
	Use ideas about density changes to explain how a hot air balloon flies or how the depth of a submarine is controlled.	* * * * *
8le		
	Describe the ways in which the size of drag forces can be changed.	* * * * *
	Describe the causes of air and water resistance.	* * * * *
	Explain why a vehicle needs a force from the engine to keep moving at a constant speed.	* * * * *