

CHAPTER 3	Modelling Gases in the Roller Rink	BLM 3.1.3
ASSESSMENT		

A roller skating rink contains a large group of roller skaters moving and shaking to the music. Use the roller rink as a model to explain interactions between gas molecules.

- The behaviour of gases is affected by temperature, pressure, number of molecules, and volume. Which of these variables corresponds with...
 - the number of skaters?
 - the number of collisions between skaters and the rink walls?
 - the size of the roller skating rink?
 - the beat of the music?
- Explain what happens in the macroscopic world of the roller skaters, and then in the microscopic world of molecular interactions, when...
 - the size of the roller rink decreases
 - the number of roller skaters decrease
 - the beat of the music increases
- Create another change in the roller rink conditions and describe what would happen at both the macroscopic level and then at the microscopic level.
- Name two limitations that this roller rink model has as a model for gases.
- Create another “real” world model of gases like the roller rink model.