

Tanker Implosion Final Model

Name: _____ Date: _____ Period: _____

LT: I can explain the tanker phenomenon in terms of molecular movement and pressure.

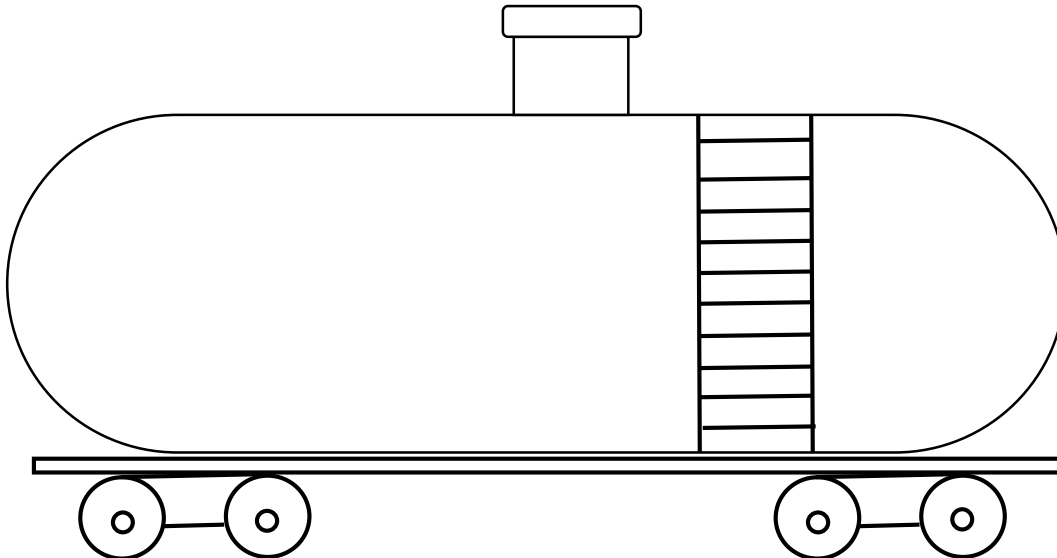
Reminder of the premise behind the Imploding Tanker Phenomenon –

The empty tanker car was pulled into the railyard and steam-cleaned with hot steam (water vapor). It was then sealed and allowed to sit in a rainstorm. (Hint: This means it was not hot outside – think less than 100°C . What happens to water vapor when the temperature falls below 100°C ?)

Directions: On the figures below use words and symbols to indicate differences in molecular movements and pressure exerted on the tanker car before and during the implosion.

- Use circles to denote molecules.
- Use arrows to indicate pressure. (Note: The length of the arrows should indicate the relative strength of the pressure. The longer the arrow, the more pressure.)
- Remember to include molecules inside and outside the tanker car and to take in account the gas pressure and atmospheric pressure.

Before:



During:

