

Separation of a Mixture Post-lab Questions

NAME: _____

1. A student started this experiment with a mixture weighing 2.345 g. After separating the components, a total of 2.765 g of material was recovered. Assume that all the weighing and calculations were done correctly. How could you explain the increase in weight of the recovered material?
2. Is Iron (Fe) an element or compound? How do you know?
3. Is salt (NaCl) an element or a compound? How do you know?
4. Is the starting mixture of iron filings, salt, and sand a homogenous mixture (perfectly evenly mixed together), or a heterogeneous mixture (not totally mixed evenly)?
5. A bunch of french fries with a mass of 100.0 g was covered in hexane (an organic liquid) in order to separate the oil. After separating and evaporating the hexane, there was 6.25 g of cooking oil that was taken out of the french fries. What was the percent oil in the potatoes? Show your calculations.