

Science 8 Separating Mixtures Worksheet #2

Name _____ Date _____ Period _____

1. Skimming or flotation is normally used to separate what **general** kinds of mixtures?

2. What characteristic property of the fractions in the mixture must be different between them, in order for this technique to work? _____

3. Which of the following fractions could be separated from a mixture by **skimming them off the top**, if the mixture is placed in water? *Look carefully at all of the properties !*

fraction(s) _____

Fraction	Density in g/cm ³	Melting point in °C	Boiling point in °C	Solubility in cold water	Solubility in methanol
A	2.64	277	588	soluble	insoluble
B	.66	279	1120	soluble	insoluble
C	2.49	280	980	insoluble	soluble
D	.51	277	786	insoluble	insoluble

4. If the entire mixture were placed in methanol (density .79 g/cm³), stirred, and then the liquid was poured off, which fractions would be left behind in the original container and which fractions would be with the liquid that was poured off?

fraction(s) left behind in container _____

fraction(s) poured off with liquid _____

5. What kind of a mixture is paper chromatography normally used to separate **and** what must be different about each of the fractions in order for the technique to work properly?

6. An unknown solid is able to be separated into fractions, and when the fractions are put together again, all of the properties are the same as the original unknown solid . Based on this information, the unknown solid is a (**pure substance, mixture**). Pick just **one** of the two !!
