

Unit 10 - Exercise 3 – Acids and Bases

Use the information gathered from an experiment below to answer the following questions.

Substance	Red Litmus Paper	Blue Litmus Paper	Hydrion Paper
Orange Juice	red	red	4
TUMs	blue	blue	10
Deodorant	blue	blue	8
Coffee	red	red	5
Milk	red	blue	7

1. Which of the substances are acids? Explain how you know.
2. Which of the substances are bases? Explain how you know.
3. Which of the substance are neutral? Explain how you know.
4. A scientist is examining an unknown substance. He unsafely decides to taste and touch it and finds that it feels slippery and tastes bitter. Which type of substance is he likely dealing with?
5. A student mixes an unidentified acid with an unidentified base. What will the product(s) of this reaction be?
6. The products of the reaction in questions 5 will have what pH?
7. A tanker carrying a strong acid is involved in an accident and spills acid all over the road. What should be done to clean up the spill and prevent the acid from harming the environment?

8. Use your knowledge of acids and bases to explain why a person with heartburn would take TUMs to eliminate their heartburn.