

Chemistry in Biology

Section 3 Water and Solutions

Main Idea _____ **Details** _____

Scan Section 3 of the chapter. Identify two facts you discovered about water.

1. _____
2. _____

Review Vocabulary

Use your book or dictionary to define physical property.

physical property

New Vocabulary

Write the correct vocabulary term in the left column for each definition below.

_____	substance that releases hydroxide ions when dissolved in water
_____	substance that releases hydrogen ions when dissolved in water
_____	substance in which another substance is dissolved
_____	mixture that can react with an acid or a base to keep the pH within a particular range
_____	measure of concentration of hydrogen ions in a solution
_____	substance that is dissolved in a solvent
_____	weak interaction involving a hydrogen atom and a fluorine, oxygen, or nitrogen atom
_____	molecule that has oppositely charged regions
_____	mixture that has a uniform composition throughout
_____	combination of two or more substances in which each substance retains its individual characteristics and properties

Academic Vocabulary

Define suspend to show its scientific meaning.

suspend

Section 3 Water and Solutions (continued)

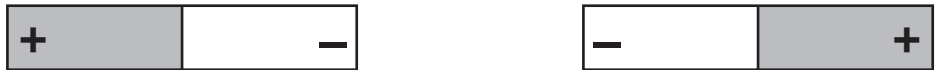
Main Idea _____

Details _____

Water's Polarity

I found this information on page _____.

Analyze *polarity by writing attract or repel to complete the diagram.*



Analyze *reasons for water's polarity and the effect of polarity.*

Polarity of Water	
Reasons for polarity:	Effects of polarity:

Model *the hydrogen bonds that form between water molecules. Choose a way to represent the hydrogen bonds, then label at least one hydrogen bond.*

Section 3 Water and Solutions (continued)

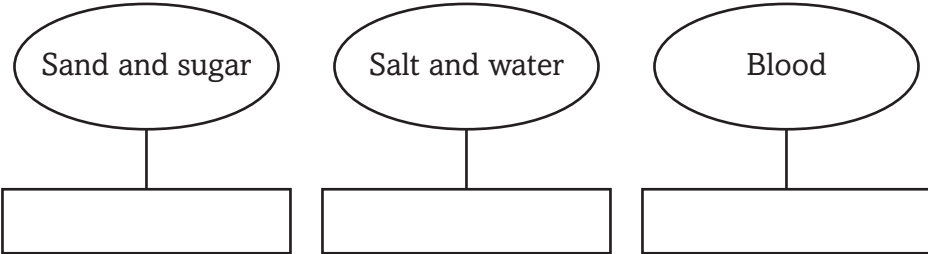
Main Idea

Details

Mixtures with Water

I found this information on page _____.

Identify each of the following mixtures as either homogeneous or heterogeneous.

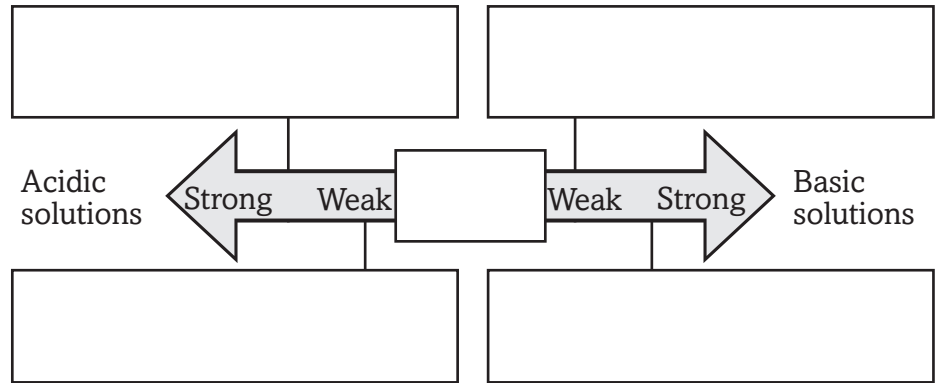


For any homogeneous mixture above, identify the solvent and the solute.

Solvent: _____ Solute: _____

Construct a model of acidic solutions and basic solutions by placing each of the items below in the correct sequence on the scale.

- releases some hydrogen ions
- releases many hydrogen ions
- water
- releases some hydroxide ions
- releases many hydroxide ions



SUMMARIZE

Compare and contrast homogeneous mixtures and heterogeneous mixtures.
