Learning Target: I can explain the effect of temperature, solute size (surface area), and agitation on the rate of dissolving.

Factors Affecting Rates of Dissolving Activity

1. In Kool-Aid sugar is the _____ and water is the _____. As you add water to a solution it becomes _____. As you remove water from a solution it becomes _____

2. Salt is able to conduct _____. If you add more salt (NaCl) to a solution the conductivity of the solution _____.

3. If you want a sugar crystal to dissolve faster you should _____ the surface area, _____ the temperature, and _____ stirring/agitation of the sugar crystal.

4. Which one dissolves faster, table salt or rock salt? _____ Why? _____

5.

Solution	Mass of NaCl (g)	Volume of Water (mL)
A	10.0	150.0
B	10.0	175.0
C	10.0	200.0
D	10.0	225.00

Which solution above has the lowest salt concentration? _____ Highest salt concentration? _____

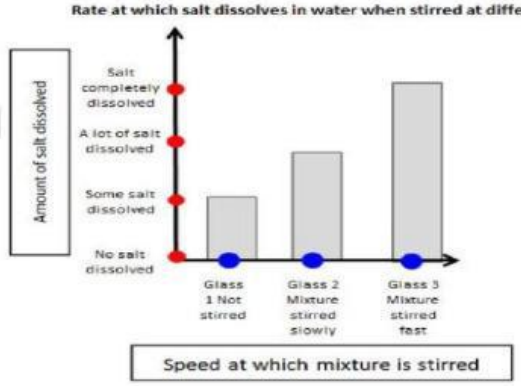
6. **Dissolving Data for Three Antacid Tablets**

Beaker	Original Temperature of Water (°C)	Time for Tablet to Dissolve (s)
1	20.	40.
2	30.	25
3	40.	10.

-Which beaker of water will dissolve the tablet the fastest? ____ Why? _____

-Which beaker of water will dissolve the tablet the slowest? ____ Why? _____

7.



-Which glass will dissolve the mixture the fastest? _____ Why? _____

- Which glass will dissolve the mixture the slowest? ____ Why? _____

8. What three factors affect the rate of dissolving of solutions? _____

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