 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Devise an enquiry to compare how well indigestion remedies work.



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| Know | |  | Apply  2  1 | |
| Ideas | |  |  |  |
| K1 | The pH of a solution depends on the strength of the acid: strong acids have lower pH values than weak acids. |  | A1 | Identify the best indicator to distinguish between solutions of different pH, using data provided. |
| K2 | Mixing an acid and alkali produces a chemical reaction, neutralisation, forming a chemical called a salt and water. |  | A2 | Use data and observations to determine the pH of a solution and explain what this shows. |
| A3 | Explain how neutralisation reactions are used in a range of situations. |
|  | |  | A4 | Describe a method for how to make a neutral solution from an acid and alkali. |
| Facts | |
| K3 | Acids have a pH below 7, neutral solutions have a pH of 7, alkalis have a pH above 7. |  |  |  |
| K4 | Acids and alkalis can be corrosive or irritant and require safe handling. |  | A5 |  |
| K5 | Hydrochloric, sulfuric and nitric acid are strong acids. |  |  |  |
| K6 | Acetic and citric acid are weak acids. |  |  |  |
|  | |  | A6 |  |
| Key words | |
| K7 | **pH:** Scale of acidity and alkalinity from 0 to 14. |  |  |  |
| K8 | **Indicators:** Substances used to identify whether unknown solutions are acidic or alkaline. |  |  |  |
| K9 | **Base:** A substance that neutralises an acid - those that dissolve in water are called alkalis. |  |  |  |
| K10 | **Concentration:** A measure of the number of particles in a given volume. |  |  |  |
| 3 | Extend |  |  |  |
| E1 | Given the names of an acid and an alkali, work out the name of the salt produced when they react. |  |  |  |
| E2 | Deduce the hazards of different alkalis and acids using data about their concentration and pH. |  |  |  |
| E3 | Estimate the pH of an acid based on information from reactions. |  |  |  |
| E4 |  |  |  |  |
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| E5 |  |  |  |  |
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