



LHS GEMS

Secret Formulas

Provided by:

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| Information | Program Description |
|------------------------|--|
| Kindergarten–3rd Grade | In Secret Formulas, students become laboratory scientists and creative inventors as they make their own paste, toothpaste, cola and ice cream. Science and math combine to provide real-life experiences with chemistry, cause and effect, and science processes. |
| Curriculum Format | Each lesson can be presented in 45-60 minutes. Teaching Guide with complete instructions is provided. Teaching Kit with materials needed to present lessons is provided. User may need to provide standard classroom supplies (pencils, scissors, glue). If a lesson requires perishable items (e.g. milk), user is responsible for these purchases. |

| Lesson | Overview |
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| One: What Makes Paste? | Students learn that ingredients are things we can mix together to make something. Students observe and test four possible ingredients for paste. |
| Two: Tasting and Describing Cola | Students observe and compare the attributes of cola. |
| Three: Investigating an Ingredient of Cola | Students explore the central concept of cause and effect with soda ingredients, mainly sugar. |
| Four: Secret Formulas for Cola | Students apply previous knowledge of sugar and new ingredients to make their own secret formula for cola. |
| Five: Tasting, Describing, and Testing Toothpaste | Students begin testing four ingredients for toothpaste. |
| Six: Testing More Toothpaste Ingredients | Students continue testing four toothpaste ingredients to find which ingredient cleans the best. |
| Seven: Secret Formulas for Toothpaste | Students apply previous knowledge to create their own secret formula for toothpaste. |
| Eight: Ice Cream Testing | Students are introduced to ice cream ingredients then they measure, mix, make and taste their ice cream. |
| Nine: Secret Formulas for Ice Cream | Students apply previous knowledge following the procedure for making ice cream. Students apply the processes of measuring, mixing, recording, evaluating and adjusting the ingredients to create their very own ice cream. |

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