

# CREATIVE COSMETICS LAB



Please observe the safety information below, the advice for supervising adults on page 1, the safety rules on page 3, and the information about hazardous substances (chemicals) and their environmentally sound disposal, the first aid information, and the other safety information on the inside front cover.

**WARNING.** Not suitable for children under 8 years. For use under adult supervision. Read the instructions before use, follow them and keep them for reference. Keep the kit out of reach of children under 8 years old. Contains glass that may break. Contains some chemicals which present a hazard to health. Do not allow chemicals to come into contact with any part of the body, particularly the mouth and eyes (except as instructed in the manual). Keep small children and animals away from experiments.

**WARNING** — This set contains chemicals that may be harmful if misused. Read cautions on individual containers and in manual carefully. Not to be used by children except under adult supervision.

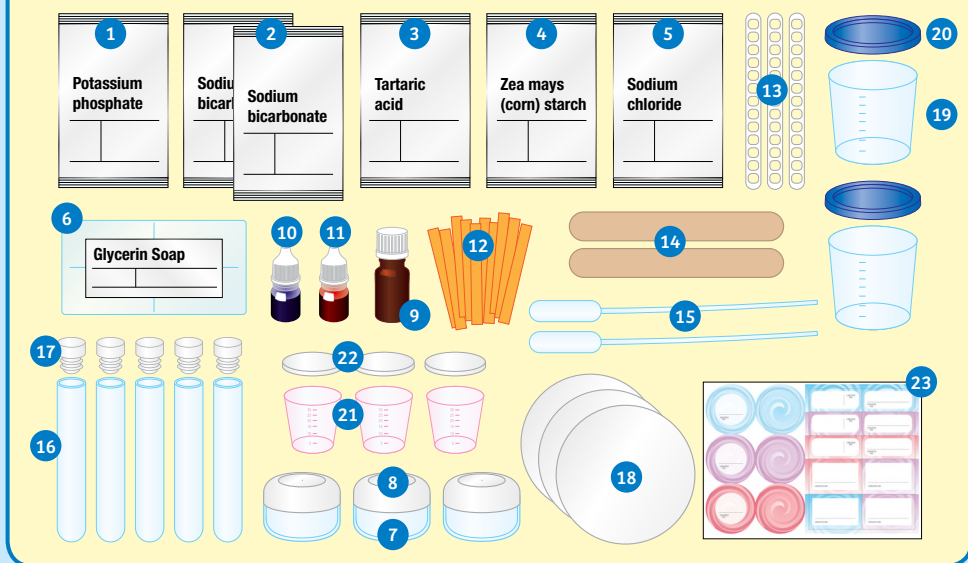


## >>> KIT CONTENTS

**GOOD TO KNOW!** If you are missing any parts, please contact Thames & Kosmos customer service.

US: techsupport@thamesandkosmos.com  
UK: techsupport@thamesandkosmos.co.uk

## What's inside your experiment kit:



## Checklist: Find – Inspect – Check off

✓ No.	Description	Qty.	Item No.
<input type="radio"/>	1 Potassium phosphate (Potassium dihydrogen phosphate), 30 g	1	775 237
<input type="radio"/>	2 Sodium bicarbonate (Sodium hydrogen carbonate), 30 g	2	775 236
<input type="radio"/>	3 Tartaric acid, 30 g	1	775 238
<input type="radio"/>	4 Zea mays (corn) starch, 100 g	1	774 801
<input type="radio"/>	5 Sodium chloride (Salt), 50 g	1	775 255
<input type="radio"/>	6 Glycerin soap, 200 g	1	719 293
<input type="radio"/>	7 Cream jar	3	719 288
<input type="radio"/>	8 Cream jar lid	3	719 289
<input type="radio"/>	9 Perfume oil, 10 ml	1	775 250
<input type="radio"/>	10 Blue cosmetic dye, 10 ml	1	719 511
<input type="radio"/>	11 Red cosmetic dye, 10 ml	1	719 483
<input type="radio"/>	12 pH test strip	10	773 220
<input type="radio"/>	13 Plastic stirring rod	3	705 727
<input type="radio"/>	14 Wooden spatula	2	000 239
<input type="radio"/>	15 Pipette	2	232 134

✓ No.	Description	Qty.	Item No.
<input type="radio"/>	16 Test tube	5	705 813
<input type="radio"/>	17 Test tube stopper	5	705 814
<input type="radio"/>	18 Filter paper sheet	3	702 842
<input type="radio"/>	19 Large beaker, 125 ml	2	087 077
<input type="radio"/>	20 Lid for 125-ml beaker	2	087 087
<input type="radio"/>	21 Small beaker, 30 ml	3	065 099
<input type="radio"/>	22 Lid for 30 ml beaker	3	061 160
<input type="radio"/>	23 Sticker sheet	1	719 283
<input type="radio"/>	24 Plastic experiment station and molds (not shown)	1	719 282

**You will also need:** oil (such as olive oil, almond oil, grapeseed oil, safflower oil, jojoba oil, avocado oil, peanut oil, rosehip oil, sesame oil, macadamia nut oil, or sunflower oil), sugar, mild soap, water, cosmetic tissues, mirror, fresh or dried flower or herbs, funnel, two (amber) glass jars, sea salt, epsom salt, liquid dish soap, microwave, microwave-safe glass bowl, two bowls, measuring spoons, oven, baking sheet, aluminium foil, shower gel, gelatin, refrigerator, honey

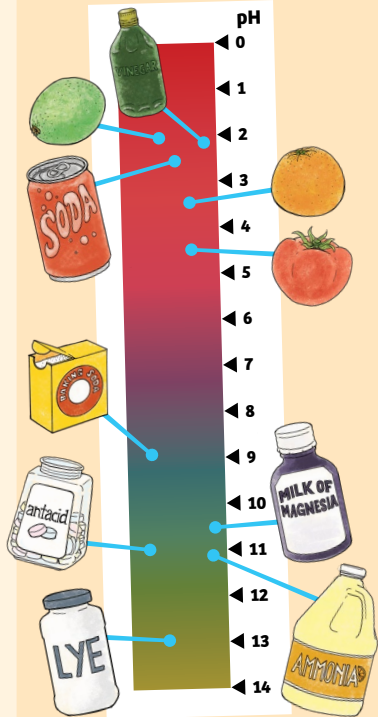
## &gt;&gt;&gt; TABLE OF CONTENTS

Safety Information .....	Inside front
Information for Parents .....	1
Kit Contents .....	2
Table of Contents .....	3
Safety Rules .....	3
<b>Experiment 1: Make a salt scrub.....</b>	<b>4</b>
<b>The Skin: Our Largest Organ.....</b>	<b>5</b>
<b>Experiment 2: What type of skin</b>	
<b>do I have? .....</b>	<b>8</b>
<b>Care for Your Skin Type .....</b>	<b>8</b>
<b>Experiment 3: Make scented</b>	
<b>oils .....</b>	<b>11</b>
<b>Aroma Compounds .....</b>	<b>12</b>
<b>Experiment 4: Make a salt bath .....</b>	<b>13</b>
<b>Experiment 5: Oil and water .....</b>	<b>14</b>
<b>Hydrophobic vs. Hydrophilic.....</b>	<b>15</b>
<b>Experiment 6: Emulsions .....</b>	<b>16</b>
<b>Experiment 7: Make molded</b>	
<b>glycerin soaps .....</b>	<b>17</b>
<b>What Is Glycerin? .....</b>	<b>18</b>
<b>How Is Soap Made? .....</b>	<b>19</b>
<b>Experiment 8: Testing acidity</b>	
<b>with pH test strips.....</b>	<b>20</b>
<b>Acids and Bases.....</b>	<b>21</b>
<b>Experiment 9: Make a bath bomb ...</b>	<b>23</b>
<b>Experiment 10: A second bath</b>	
<b>bomb formula .....</b>	<b>24</b>
<b>Experiment 11: Fizzing bath</b>	
<b>bomb experiment .....</b>	<b>25</b>
<b>Experiment 12: Shower dough .....</b>	<b>26</b>
<b>Experiment 13: Liquid or solid? .....</b>	<b>27</b>
<b>What Is Starch? .....</b>	<b>27</b>
<b>Experiment 14: Shower jellies .....</b>	<b>28</b>
<b>Experiment 15: Shower jelly</b>	
<b>experiment .....</b>	<b>29</b>
<b>Collagen .....</b>	<b>30</b>
<b>Experiment 16: Lip rub .....</b>	<b>31</b>
<b>Read My Lips .....</b>	<b>32</b>

## Safety Rules

1. Read these instructions before use, follow them and keep them for reference.
2. Keep younger children under the specified age limit and animals away from the activity area.
3. Store chemical toys out of reach of young children.
4. Wash hands after carrying out activities.
5. Clean all equipment after use.
6. Do not use any equipment which has not been supplied with the set or recommended in the instructions for use.
7. Do not eat, drink or smoke in the activity area.
8. Make sure that all containers are fully closed and properly stored after use.
9. Ensure that all empty containers are disposed of properly.
10. Do not allow chemicals to come into contact with the eyes or mouth.
11. Do not replace foodstuffs in original container. Dispose of immediately.
12. Test all cosmetics that you make with this kit first on the inside of your forearm and allow 24 hours to pass before applying them to the rest of your body. This way, you can find out if you will have an allergic reaction to one of the components before you apply it to the rest of your body or face.
13. You should label all the containers of your custom cosmetics with the date, contents, and name. Special self-adhesive labels are provided for you to write on and attach.

## CHECK IT OUT



**pH:** Chemists use the pH system to measure acidic and basic solutions. pH stands for “potential of hydrogen,” and the p is lowercase while the H is capitalized. The pH scale goes from 0 to 14. Values below 7 are acidic and values above 7 are alkaline. Pure water has a pH of 7, which is considered neutral — neither acidic or alkaline.

Healthy skin has a pH-value of 5.5 to 6.5. After washing with regular soap, its pH-value will be elevated to about 9. It can take up to 2 hours before the skin can replace its acidic protective coat. Until then, if the skin is too weak, the doors are wide open for attacks by infectious agents. You can help your skin protect itself by selecting suitable skin care products in the range of pH 5 to 5.5.



Many plants, such as cherries, violets, blueberries, and black currants contain natural dyes that act as indicators.

Why do pH strips change color when they come in contact with an acid or base? pH strips are made from filter paper that has been soaked in different pH indicators and allowed to dry. An indicator is a molecule that will change color if it is placed in an acid or a base.



## EXPERIMENT 9

## Make a bath bomb

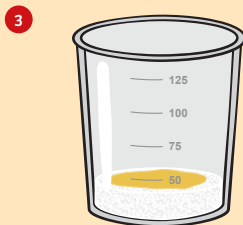
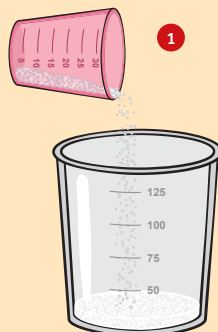
## YOU WILL NEED

Large beaker, small beaker, sodium hydrogen carbonate, tartaric acid, starch, red or blue cosmetic dye, perfume oil, wooden spatula, bath bomb mold, oil (see page 2)

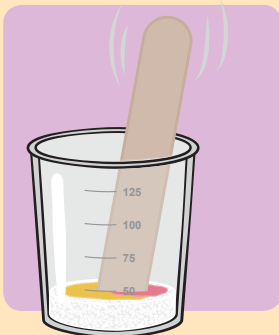
## HERE'S HOW

- 1 Measure 15 ml of sodium hydrogen carbonate with the small beaker. Then pour it into the large beaker.
- 2 Next measure 7 ml of tartaric acid, 10 ml of starch, and 7 ml of oil with the small beaker, adding each to the large beaker one at a time.
- 3 Add a few drops each of red or blue cosmetic dye and perfume oil.
- 4 Mix until it has the consistency of wet sand.
- 5 You can either mold the mixture into shapes using the mold in the kit, or you can form small balls by rolling the mixture in your hands. Let the shapes or balls dry for two days before use.

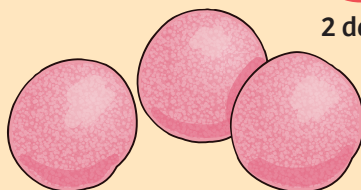
**!** Safety Note:  
Warning! See the inside front cover for hazardous chemical safety information.



4



5



2 days

## EXPERIMENT 14

# Shower jellies

### YOU WILL NEED

Large beaker, stirring rod, plastic mold, gelatin powder, water, teaspoon, tablespoon, shower gel, microwave, bowl, refrigerator

### HERE'S HOW

- 1 Place 10 grams (about 3 teaspoons) of gelatin powder and 5 tablespoons of water in a microwave-safe bowl.
- 2 Wait for five minutes.
- 3 Heat the mixture in the microwave until the gelatin becomes liquid (about 15–20 seconds).
- 4 Measure 120 ml of your favorite shower gel and 120 ml of lukewarm water and add these to the bowl.
- 5 Mix it well with the stirring rod and pour it into the plastic mold.
- 6 Let it cool down and harden in the refrigerator for one day.
- 7 Now your shower jellies are ready to use. You can use them like a bar of soap.

