

# SOLUTION

READ ONLY IF YOU ARE  
READY FOR THE SOLUTION!

# CANDY FACTORY

As soon as you set foot in the Candy Factory belonging to your sweet-as-candy Uncle Lucas, the adventure starts. You have exactly one hour to get all the candy of the order for the Halloween party prepared before the couriers arrive to pick it up. If only you had paid closer attention during your Uncle's factory tours... Have you managed to follow Uncle Lucas's tips for making and checking all the candy of the order? Or did you miss something? Read below to find out what you were supposed to do to rescue the party.

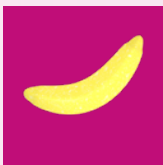
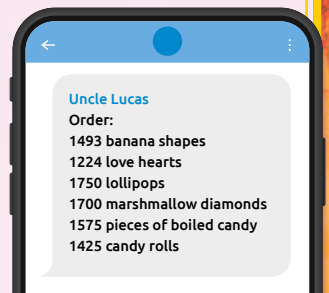
## PART 1

### MAKE THE MISSING CANDY OF THE ORDER

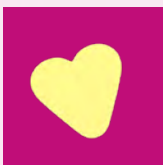
*But where to start? There are containers, boxes and bags full of candy everywhere. Luckily, Uncle Lucas has left some tips for you and quite a bit of candy is already available in stock. Have a good look around the Factory to see which candy has already been done and which is left to be made.*

#### 1. Which types of candy are available in sufficient quantities and which types are not?

The text message on the envelope states how many pieces are needed for each type. By counting the candy pieces that are already available in the Factory, you will find out which type of candy has pieces missing. There is a chalkboard up in the Factory stating 'multi-pack instructions' from which you can see how many pieces of each candy are held in the various types of packaging. Have a good look around the Factory to see which candy is already packaged and which loose pieces of candy have already been done too.



On the table, you notice 3 bags of banana-shaped candy. Each bag has a label stating the number of banana shapes inside. One bag contains 1000 units, another 200 and a third 280. Add to this the 13 loose banana shapes from the table. This makes a total of  $1000+200+280+13 = 1493$  banana shapes – the exact quantity you need for the order!



On the conveyor belt, you notice 12 cone bags. The chalkboard states that the cone bags only contain love hearts and that there are 102 love hearts in each bag. So  $102 \times 12$  cone bags = 1224 love hearts. So you will not need to make any more of this type of candy either.



Across the whole Factory, there are lollipop displays, including in the Ingredient Room on the back. You see from the chalkboard that there are 150 lollipops in one display. You count 7 displays, so there are  $7 \times 250 = 1750$  lollipops. Again, you will not need to make any more of this type either.



You notice a large cardboard box containing smaller boxes. The flap is showing 17 tally marks indicating there are 17 boxes inside. The multi-pack instructions state that there are 100 marshmallow diamonds in each box. In total you therefore have  $17 \times 100 = 1700$  marshmallow diamonds: the exact quantity of the order. So you will not need to make any more marshmallow diamonds either.



There is a note in the Factory stating 'Candy roll = 285 meters'. This is Uncle Lucas's way of indicating that 285 meters of candy roll has already been made. The multi-pack instructions indicate that it takes 1 meter of candy lace to make 5 rolled up candy rolls. So, 285 meters of candy roll make  $285 \times 5 = 1425$  Candy rolls. Again, the exact number you need.



You notice 3 glass lidded jars containing boiled candy: 2 in the Factory Hall and 1 in the Ingredient Room on the back. The chalkboard states that each jar contains 175 boiled candy pieces. So there are  $175 \times 3 = 525$  boiled candy pieces in the Factory. According to the order, you need 1575. So you do not have enough! You are missing  $1575 - 525 = 1050$  boiled candy pieces. Uncle Lucas asks how many multi-packs are missing. Divide  $1050$  by  $175 = 6$  containers of boiled candy. So you need to make an additional 6 containers of boiled candy.

**First key: 6**

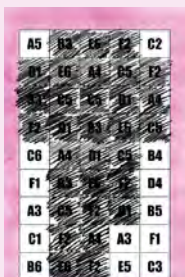
## 2. Pour the ingredients into the correct funnels of the machine.

To work out the second key, look at the 6 types of ingredients in the cabinet in the Ingredient Room. In the cabinet, there are various shapes of packaging with their associated label with a letter and the name of the ingredient. The shapes of the funnels in the Factory correspond with the shapes of the packaging in the cabinet: The glass sugar bowl in the cabinet (A) has a red ribbon, just like funnel 4 in the Factory; the water jug in the cabinet (B) has a teardrop shape, just like the metal funnel for water (3) in the Factory; the glass bottle with top containing binding agent (C) has the same shape as funnel 5; the colored plastic bottles of colorant (D) have the same shape as funnel 1; the metal pan with gelatine (E) has the same shape as funnel 6 and the wooden pyramid-shaped bottle with flavoring (F) has the same shape as the wooden funnel 2 in the Factory.

The correct letter & number combinations are therefore: sugar **A4**, water **B3**, binding agent **C5**, colorant **D1**, gelatine **E6** and flavoring **F2**. Color in all the sections with these letter & number combinations on the back of the task and look for the shape of a key that has a bite taken from the bottom right corner.



**Second key:**  
key with  
a corner  
out at the  
bottom  
right

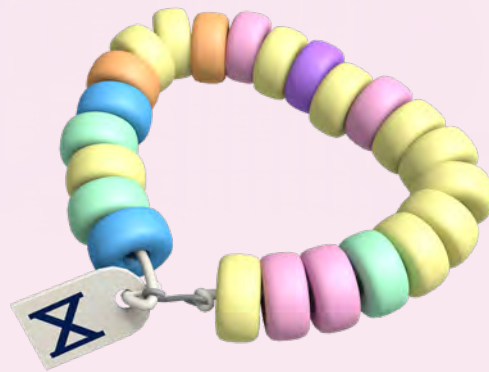
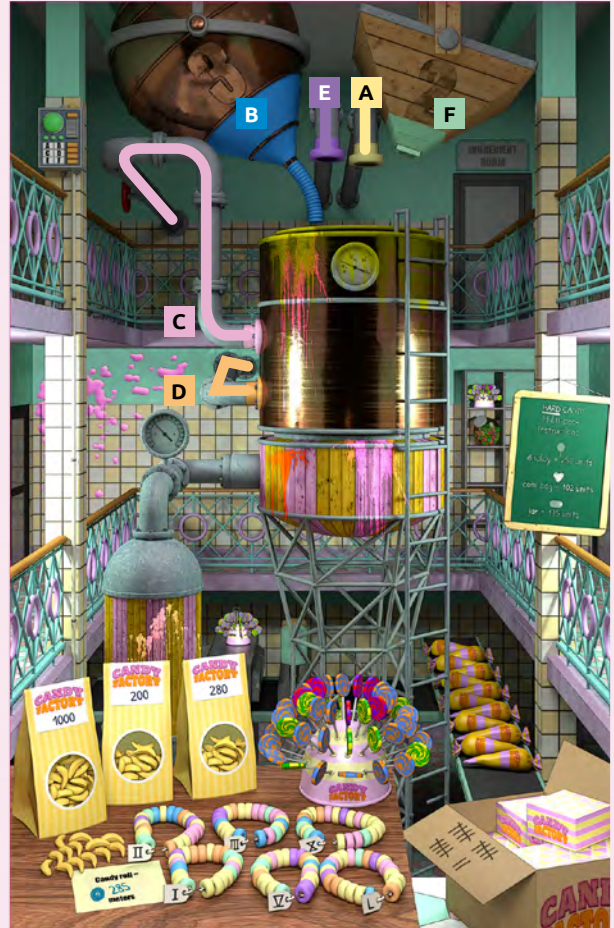




**3. Select the correct recipe bracelet.**

Task 1 revealed that you need to make additional boiled candy. To work out the third key, you need to find out which recipe bracelet corresponds with the boiled candy. The 6 recipe bracelets on the table in the Factory consist of 6 different colors of candy. Each color represents one of the ingredients. The same 6 colors can be found on the nozzles of the mixing machine. From each of the nozzles, trace the tubes up to the funnels to work out how the funnel colors and the ingredients match up: sugar = yellow, water = blue, binding agent = pink, colorant = orange, gelatine = purple and flavoring = green. The loose pieces of boiled candy indicate how much of which ingredients has gone into boiled candy: 11 sugar, 2 water, 4 binding agent, 2 colorant, 1 gelatine, 3 flavoring. So, find the bracelet with 11 yellow, 2 blue, 4 pink, 2 orange, 1 purple and 3 green pieces of candy. This bracelet has a label showing Roman numeral X.

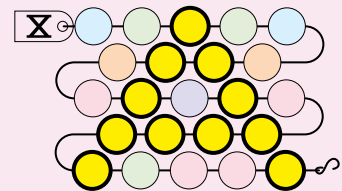
**Third key: Roman numeral X**



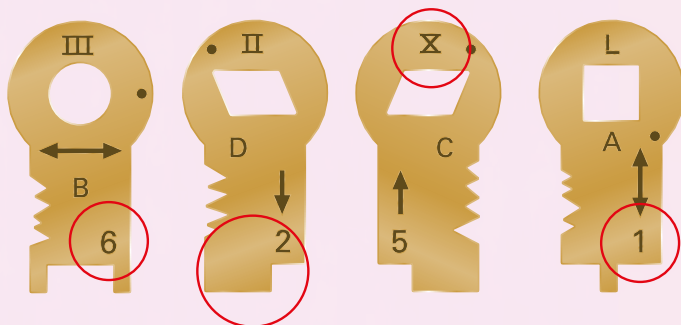
**4. Press the correct button to start the machine.**

To work out the last key, color the pieces of candy that occur most frequently in the recipe bracelet for boiled candy. Color in all the yellow pieces of candy on the back of the task; together, these form the letter A. So you must press button A on the machine for the machine to make boiled candy.

**Fourth key: A**



**CODE PART 1: 6 L X A**



## PART 2

### QUALITY CHECK

You managed to make the missing candy, but have they turned out OK? Part of the candy needs to go through the Quality Check Machine. The machine decides whether they meet the required shape, scent and color standards. Ultimately, all the candy drops down and is sorted across the 4 containers.

Take all 18 pieces of candy and read Uncle Lucas's instructions on the envelope. Have a good look at the Quality Check Machine. The machine consists of 6 different check points (hardness, appearance, 2 different scents, infra-red and color). Depending on whether a piece of candy is approved (✓) or not (✗), it will proceed to the next check point. This way, each piece of candy takes a different route through the machine and ultimately, they end up in one of the 4 containers at the bottom of the machine.

Start from the top of the machine, select the correct direction and trace the tubes to the next check point in the machine. Each piece is checked for possible inconsistencies, so always thoroughly check the candy from all sides.

**Hardness check:** first distinguish between hard and soft candy. If you are not familiar with the candy and do not know whether it is hard or soft, you can check it against the information from the chalkboard in Part 1.

#### Soft candy

all candy rolls, banana shapes and marshmallow diamonds.  
3× banana shapes  
3× candy rolls  
3× marshmallow diamonds

to **Appearance check**

#### Hard candy

all boiled candy, lollipops and love hearts.  
3× boiled candy  
3× lollipops  
3× love hearts

to **Orange scent check**

**Appearance check:** all soft candy proceeds to the appearance check; all candy without blemishes, broken pieces, shape deviations etc. proceeds to the banana scent check. ✓

The 'failed' candy proceeds to the color check. ✗

✓

2× banana (8, 14)  
2× candy rolls (12, 18)  
3× marshmallow (7, 13, without number)

to **Banana scent check**

✗

1× banana (without number)  
1× candy roll (without number)

to **Color check**

**Orange scent check:** rub the sticker with a finger and smell it. Does this candy not smell of orange? Then it proceeds to the infra-red check ✗. If it does smell of orange, it proceeds to the color check ✓.

✓

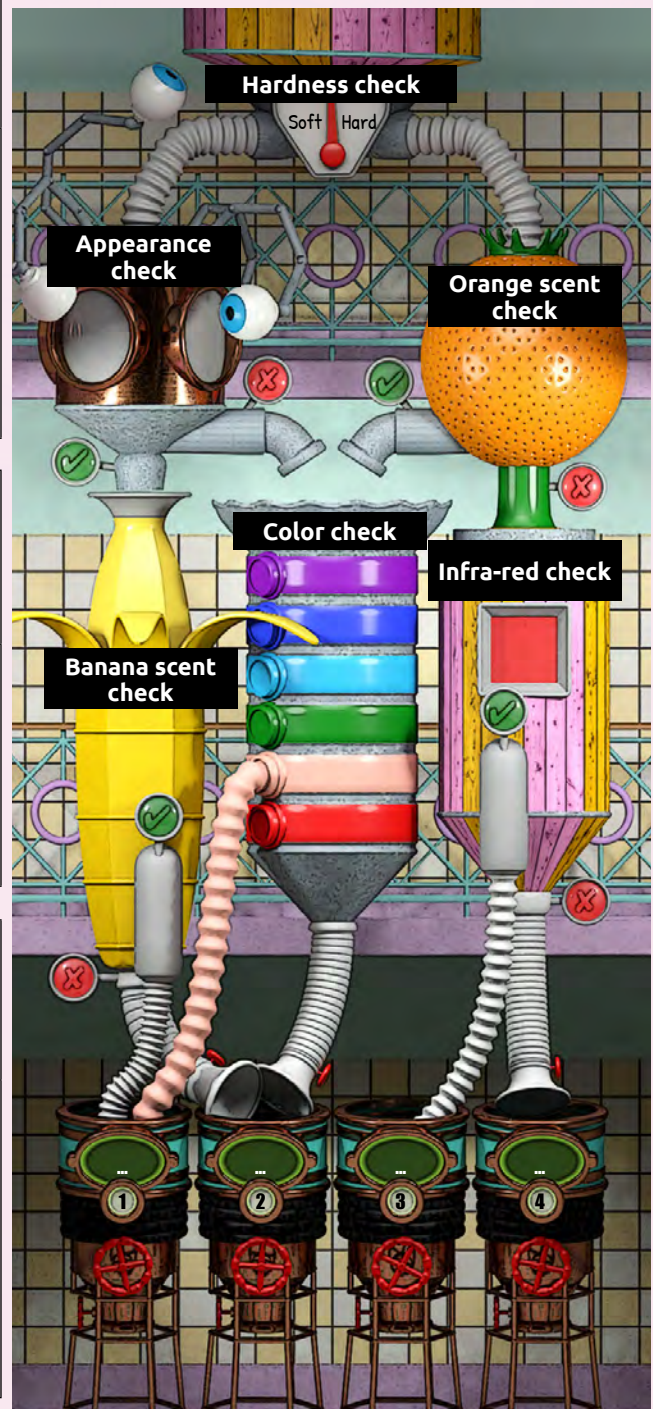
1× boiled candy (3)  
2× love heart (16, 10)

to **Color check**

✗

2× boiled candy (15, without number)  
3× lollipop (5, 11, without number)  
1× love heart (without number)

to **Infra-red check**



**Banana scent check:** rub the sticker with a finger and smell it. Does this candy smell of banana? If so, it proceeds to container 1 ✓. If it does not smell of banana, it proceeds to container 2 ✗.

✓ container 1  
2× banana (8, 14)  
1× marshmallow (7)  
1× candy roll (12)

✗ container 2  
1× candy rolls (*without number*)  
2× marshmallow (1, 13)

**Infra-red check:** Place the candy wrapper over the candy and check inside each piece of candy. One of the pieces of candy has a little spider inside! It proceeds to container 3 ✓; the rest proceeds to container 4 ✗.

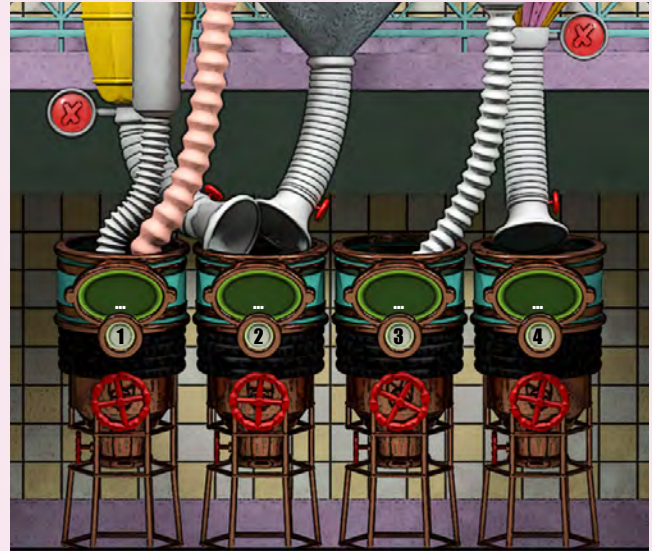
✓ container 3  
1× lollipop (11)

✗ container 4  
2× boiled candy (15, *without number*)  
2× lollipops (5, *without number*)  
1× love heart (*without number*)

**Color check:** (Partly) pink-colored candy proceeds to container 1; all the other candy proceeds to container 2.

pink container 1  
1× love heart (10)  
1× boiled candy (3)

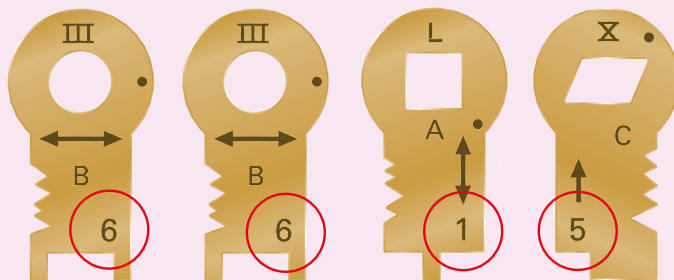
remaining candy container 2  
1× love heart (16)  
1× banana (*without number*)  
1× candy rolls (18)



1	2	3	4

Ultimately, the pieces of candy drop down in the 4 containers numbered 1 to 4. The number of pieces of candy per container form the keys in that order. Container 1 contains 6 pieces of candy (1 marshmallow diamond, 2 banana shapes, 1 candy roll, 1 boiled candy and 1 love heart), container 2 also contains 6 pieces of candy (2 marshmallow diamonds, 1 banana shape, 2 candy rolls and 1 love heart), container 3 contains 1 lollipop and container 4 contains 5 pieces of candy (1 love heart, 2 lollipops and 2 pieces of boiled candy).

## CODE PART 2: 6 6 1 5



## PART 3

### THE DRYING ROOM (PUT A STOP TO UNCLE LUCAS'S CUNNING PLAN)

The quality check has been successful; there is only one container with failed pieces. Fortunately, most of the candy is perfect! You can continue with the order!

But then the machine comes to a halt and, against Uncle Lucas's strict warning, you enter the Drying Room anyway. Here you find out your Uncle's secret: it turns out that, in the Drying Room, the candy is secretly injected with an addictive substance. You must create an antidote so that the candy can be eaten without any problems at Halloween!

#### The recipe

Follow the recipe to select the correct 4 bottles for the antidote.

This is the order of the keys.



WORK OUT THE CORRECT FOUR BOTTLES:

1. 2. 3. 4.

REBUS



How many pieces of candy smell of orange?

#### 1) REBUS

To work out which is the first bottle (and key), you first join the 2 parts of the poster together. Above the Quality Check Machine (from Part 2) is the top of a poster showing a row of chocolate figures. In the Laboratory, you notice the bottom of the poster with the key to the rebus. Join the 2 parts together and solve the rebus:

1 The first picture is a BAG. The double

arrow indicates that the first and last letters should be reversed: GAB.

Then change the 'G' to 'GR' and you get the word: GRAB.

2 The second picture is: FISH. Change

the 'I' to 'LA' and you get: FLASH.

Change the 'H' to 'K' and you get: FLASK.

3 The third picture is: SUN. Remove the

'S' from the word: UN. Add 'DER' to complete the word: UNDER.

4 The fourth picture is: LION. Remove

'L' and 'O' and you are left with: IN.

5 The fifth picture is: COIN. Change 'O'

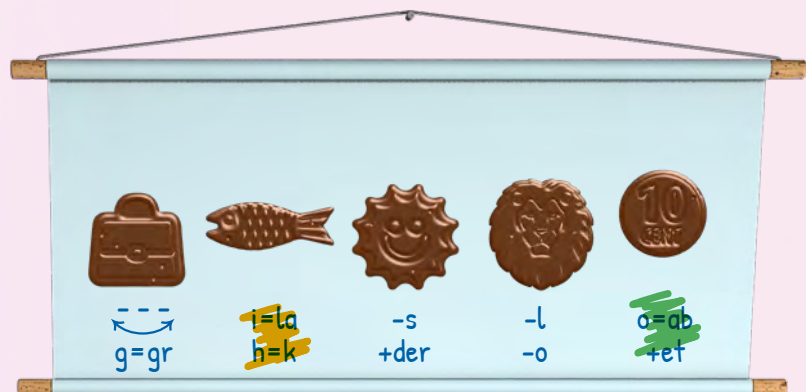
to 'AB' and you get: CABIN. Add 'ET' and you get: CABINET.

Put these words one after the other and you get the sentence: 'GRAB FLASK UNDER IN CABINET'.

The text under the fish (= flask) is orange, so it is not any flask but an orange one. The text under the coin (= cabinet) is green, so it is not any cabinet but a green one. So you get the sentence: 'Grab orange flask under in green cabinet'.

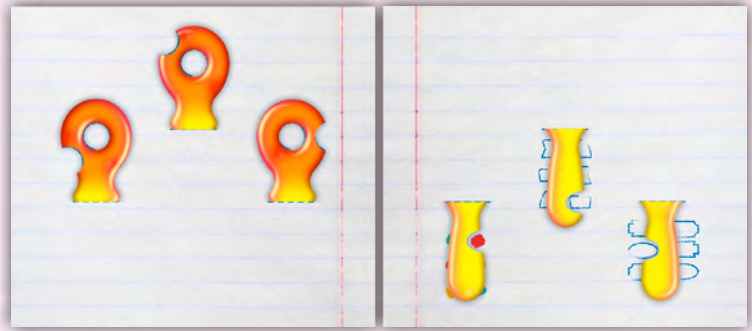
There is only one orange bottle under in the cabinet; it has an F on the label.

**First key: F**



## 2) CANDY KEYS

To work out the second key, insert the 3 candy keys through the slots in the note as can also be seen from the desk in the Laboratory. The bites taken from the rounded end of the key match the exact outline of the comments in the note. Turn the note around and you will notice symbols in the places where bites have been taken from the keys. You will notice the shape of a flat top, the oval shape of the label and the red color of the liquid and the label. This all corresponds with the bottle with label B.



**Second key: B**

## 3) FILL IN THE LOVE HEARTS

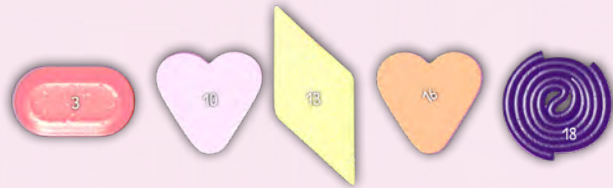
To work out the third bottle (and key), fill in the sentence written on the chalkboard using the text from the 3 love hearts. The chalkboard has a comment from Uncle Lucas written on it. Take the 3 colored love hearts from Parts 1 and 2 and fill in the words from the love hearts matching the colors to the empty spaces in this sentence: 'Grab the flask with the blue liquid and a red label'. Find this bottle in the Laboratory. You will find it on the top shelf of the green cabinet in the Laboratory. This bottle has a label with the letter F.



**Third key: F**

## 4) ORANGE-SCENTED CANDY

To work out the last bottle (and key), you need to smell the 18 pieces of candy with scent labels again. How many pieces of candy smell of orange? Count the pieces of candy that smell of orange. There are 5. Find the bottle with 5 oranges on the label under in the desk in the Laboratory. This bottle has a label showing the letter C.



**Fourth key: C**

## CODE PART 3: F B F C

