

Fruit ice cream

1 Overall aims:

- To experience with liquid and solid
- To understand change of status (liquid to solid)
- To learn about healthy ice cream

2 Vocabulary - keywords

Liquid, solid, fruits, ice cream, healthy.

3 Sustainable abilities developed

- Strategic competency (to combine elements and processes to get a product)
- Collaboration competency (making workshop together)

4 Pillars of sustainability included

- Economic (homemade ice cream)
- Ecologic (healthy)

5 STEAM domains

S (chemical processes) T (making ice cream)

6 Teaching methodologies/activity outline

STEPS

Beginning

1. Spring is very hot this year! Who would like to eat ice cream? Perhaps mummy or dad says that we can't eat a lot of ice cream and that it's better to eat some fruit. What about making ice cream with some fruit juices?

Development

2. At home, we have some fruit juices. They are in a bottle, and we can easily introduce them in a glass. The juice drops on the glass and takes the shape of the glass (small, big, wide, or narrow). It's a liquid. It has a lot of colors depending on the kind of fruit.



3. We are going to the kitchen (school / home) and looking for some fruit juices. We'll work in a four-five member team and we need over each table a bottle of fruit juice (any kind) and 8 ice cream molds (ice cream plus stick).
4. First at all, helped by adults, children clean their hands and clean the molds. Then they come back to their table. Children must introduce juice in the molds. They must check if it's easy. If the liquid falls, we ask what we can do. Maybe put the juice in a glass first? Let's talk about their strategies!
5. The aim is to fill all the molds and then put them into the freeze.
6. What will happen to these juices? When can we check it?

Closing

7. Tomorrow: Children go to the freeze and take out the molds. We show them how to remove molds (throwing a little warm water on top). What has happened? What has the juice become? What does it taste like? Do you like it? The juice has become solid, it doesn't take any other shape!

7 Expected learning outcomes

The child will be able to:

- Recognize liquid and solid characteristics
- Recognize juice can become solids
- Argue how easy is making many ice cream with fruit juices

8 Assessment

1st aim. To experience with liquid and solid

- Does he/she recognize the characteristics of liquids?
- Does he/she recognize the characteristics of solids?

2nd aim. To understand change of status (liquid to solid)

- Can she/he argue that juices can become solid?

3rd aim. To learn about healthy ice cream

- Can she/he argue or draw that fruit ice cream is healthier than sugar ice cream?

9 Equipment and materials to be used in learning unit (tools, ingredients etc)

Beginning

1. We speak about fruit juices.

Development

2. Different kinds of fruit juices. One bottle each group.



	<ol style="list-style-type: none"> 3. Ice cream molds (ice and stick) 4. Some glasses to improve dropping juices on the molds. 5. Adult help: support teachers, teachers in practice, parents, etc.... 6. The freeze <p>Closing</p> <ol style="list-style-type: none"> 7. Every child experiences his fruit ice cream and eats it!!
10	<p>Kind of setting - lab, kitchen, outdoor etc.</p> <p>Beginning</p> <ol style="list-style-type: none"> 1. Classroom - We show some bottles of fruit juice <p>Development</p> <ol style="list-style-type: none"> 2. Kitchen / dining room. <p>Closing</p> <ol style="list-style-type: none"> 3. Classroom – Dialogue/ reflection
11	<p>References - source:</p> <p>https://www.youtube.com/watch?v=Wv-vahRL-p8</p>

