

Touch



Frozen Grapes

Learning Objectives

Duration: 45 minutes- 1 hour.

The focus of this lesson is on using the sense of touch to explore the way that the texture and feeling of grapes changes when they are frozen. Children begin to understand the relationship between consistency and temperature for food. Children use speech and language to describe the sensation of feeling frozen fruit.

Resources

Equipment: Colander, chopping board, a reusable plate for each child.

Ingredients: Purple seedless grapes.

The night before the lesson, wash them in the colander and freeze half of the washed grapes in a container in the freezer. Store the rest of the washed grapes in a food container in the fridge.

NB If you don't have access to a freezer, we recommend going back to one of the Touch lessons for Reception instead and repeating it with different produce. But this is a very exciting lesson for the children if you can make the freezing part work.

Before you start, make sure the children wash their hands.

Lesson Outline

1. Today we are learning to explore food with our senses and describe what we see, hear, touch, smell or taste. This is called TastEd, short for Taste Education.
2. Ask the class 'can anyone tell me what the five senses are?' See, touch, hear, smell and taste. For each sense ask the children which part of the body they use.
3. Explain the two golden rules of TastEd: NO ONE HAS TO TRY, NO ONE HAS TO LIKE.
4. Today we are using our sense of touch to explore the temperature of food and how this can change the way it feels.
5. Cold food feel different to hot foods.
6. At warm temperatures, some foods such as butter and other fats will melt. At colder temperatures, food becomes more solid.
7. Do you think this toast is hot or cold? (See PowerPoint).
8. What about this toast?
9. What happens to an ice cube when it melts? What happens to water when it freezes?
10. Today we are going to be trying some very cold grapes stored in the freezer. We will compare them to room temperature grapes.
11. Where do grapes grow? They grow on vines.
12. Here are some frozen grapes and some normal grapes. How do they feel different? Which one is easier to hold? (Pass round a small bunch of each and ask the children to compare them).
13. Let's cut some of them open. What differences can you see? (E.g. the cold grapes look powdery and hard, the unfrozen grapes look soft and wet).

14. You can try the grapes in your mouth. What changes do you notice to the texture of the frozen grapes. Are they softer or harder? How do they feel? Encourage the children to use similes. 'Like sorbet', 'like snow'. Use your other senses too. Do the grapes taste and smell different when they are frozen?
15. Can you write about what you felt when you felt the frozen grapes?
16. What did you learn about the texture of frozen food?
17. Is it more solid or more liquid than unfrozen food?
18. Did you like frozen or unfrozen grapes best? Can you say why? (Share observations).
19. Did anyone try anything new today?

Word Bank for Cold Grapes

Adjectives: cold, warm, tepid, solid, liquid, juicy, frosty, stiff, hard, soft, wet, dry, powdery

Similes: like an ice cube, like sorbet, like a snowball

Observations: 'it hurts my hand! I can't hold it very long!'

Success Criteria

I can explore the way that temperature affects the texture of grapes.

I can use different words- in speech and writing - to describe how a frozen grape feels different from a fresh grape.

I can talk about what I like and understand that not everyone has the same tastes.

Curriculum Links

Writing: Composing a sentence orally before writing it. (NC p. 24).

Science: 'Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth'

School Kitchen

Link to choosing fresh fruit as part of lunch.

Reading links

Owl at Home by Arnold Lobel

There is a story in this wonderful collection about Owl eating pea soup which becomes frozen solid in the cold.

We highly recommend the whole book to children of this age group.



Optional further activities

Science: Do some science experiments about the change of state of water at different temperatures. There are some excellent short films on BBC Bitesize - especially good is 'Freezing point and Boiling point' (BBC Bitesize KS2 science/changing materials).

D & T: Try experimenting with freezing some other pieces of fruit. You could get children to design their own healthy frozen fruit kebab by threading fruits on a wooden skewer. Soft fruits tend to be the best: chunks of melon, bananas, pieces of plum. Discuss which they find to be the most delicious.

Background facts for teachers

This lesson is a very simple introduction into changes of state in science: solid, liquid and gas. The children should learn that frozen grapes are much harder than room temperature grapes.

The temperature of food hugely affects all of our sensory perceptions. The texture changes and with very hot or very cold foods, the less you detect the taste or the flavour.

When foods are frozen, the sweetness becomes muted. This is why melted ice cream is so sweet. Ice cream and sorbet mixtures are made sweeter than desserts to be served at room temperature.

