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|-----------------------------------|------------|-------------|---------------------------------|----------|----------|---------------|
| Author(s): Gail Venezia | | | Lesson Title: Tasting | | | |
| Grade Span | | | ICLE Application Model | | | |
| K-4 X | 5-8 | 9-12 | A | B | C | D X |

Instructional Focus:

Reading

Students read a variety of grade level materials, applying strategies appropriate to various situations

Listening

Students listen for a variety of purposes appropriate to the grade level.

Statistics and Probability

Students use statistics and probability to analyze given situations and the results of experiments. Students communicate the reasoning used in arriving at a conclusion.

Science as Inquiry

Students demonstrate knowledge and skills necessary to perform scientific inquiry.

Performance Task

- Prepare ahead of time a plate with the following items on it: cookie, sugar cube (sweet), pretzel, potato chip (salty), lemon, dill pickle (sour) grapefruit rind, bakers chocolate (bitter)
- Have students predict what lesson we will do today.
- Identify lesson as a tasting lesson. This will be used after teaching the other 4 senses. It is important to have students understand that also we will need to use the sense of smell with this lesson.
- Discuss that we need to use our tongue as the organ we use to taste. Taste buds on the tongue help our tongue determine different kinds of taste. Our brain, tongue and taste buds work as a SYSTEM to help us identify different kinds of taste.
- Student prediction sheet-have students predict how they think each item will taste.
- Now go to the experiment. Advise the students that they will wait before tasting anything. When we taste today we will NIBBLE. Discuss what NIBBLE means. This is an important part of today's lesson. After each item they taste have students record their actual feeling about each taste. Ask students to raise their hand if they liked that taste, and to identify it as salty, sweet, bitter, or sour. Also, ask who did not like the taste. Repeat with all items on the plate. SAVE THE BAKER'S CHOCOLATE for last! Be certain not to tell them it's baker's chocolate but rather chocolate. They will be expecting this to be sweet and they can hardly wait to get to this item! After each item remind them to nibble. Then ask them to test the final item; the chocolate. The group will respond negatively to this flavor as MOST find it terribly bitter, however some kids actually like it. This is a good opportunity to discuss that we all experience different reactions to taste. There are no right or wrong answers.
- Repeat all the items to taste again, this time holding the nose, while tasting, are the results the same or different. Discuss!
- Student Actual Tasting Results-have students record those tastes they liked with a check mark, and an X for those they did not like.

- Teacher should make student spreadsheet of items tested today, and students' responses to these items as likes or dislikes.
- Make another spreadsheet of flavors, sweet, sour, salty, bitter. Did all students agree or disagree in taste identification. Discuss results.

ICLE Essential Skills

Follow oral or written directions. (ela4)

Understand the best procedures for statistical **data collection, organization, and display** including making estimates and predictions and drawing inferences.(m5)

Know and apply the principles of scientific inquiry. (*Implicit in this statement are the processes of prediction, estimation, developing hypotheses, drawing conclusions, evaluation, and following ethical principles and professional procedures.*) (s114 Not Ranked)

Make observations using senses and instruments. Inferences and interpretations are arrived at based on observations. Classify observable properties and organize observations in a meaningful and logical way.(s5)

Scoring Guide:

Rate each of the following characteristics on a 3-0 basis, where
 3=Excellent quality
 2= Satisfactory quality
 1=Unsatisfactory quality
 0=Does not attempt or does not show skill/knowledge

Characteristic

Score

| | |
|---|-------|
| Student can identify the 5 senses, and organ of body responsible. | _____ |
| Student can make predictions of how things might taste, using adjectives. | _____ |
| Student can follow oral directions, and keep accurate results of experiments. | _____ |
| Student can use simple spreadsheets to gather, synthesize, draw conclusions. | _____ |
| Student is able to make statements regarding most favorite, least favorite flavors of class sample. | _____ |

Keywords

| English Language Arts | Mathematics | Science |
|---|---|---|
| Reading | Algebra | Earth Science |
| Writing | Geometry | Life Science Scientific Inquiry Senses |
| Communications Discussion Listening Follow Directions | Statistics Charts Data Analysis Data Collection Graphs Inference Prediction, | Chemistry |
| Literature | Calculus | Physics |
| Other | Trigonometry | Other |
| | Other | |

Picture, Chart, or Graph file name(s):

Name _____

Actual Taste Results

Tasting Words:

Sweet salty sour bitter

I was in my taste prediction of the cookie.

I was in my taste prediction of the grapefruit rind.

I was in my taste prediction of the potato chip.

I was in my taste prediction of the sugar cube.

I was in my taste prediction of the dill pickle.

I was in my taste prediction of the lemon.


I was in my taste prediction of the pretzel.

I was in my taste prediction of the chocolate.

Taste Table and Graph


| | A | B | C | D | E |
|----|-------------|------------|-----------------------|---|---|
| 1 | | Like taste | do not like the taste | | |
| 2 | Cookie | 20 | 0 | | |
| 3 | Grapefruit | 5 | 15 | | |
| 4 | Potato Chip | 20 | 0 | | |
| 5 | Sugar Cube | 10 | 10 | | |
| 6 | Dill Pickle | 3 | 17 | | |
| 7 | Lemon | 1 | 19 | | |
| 8 | Pretzel | 15 | 5 | | |
| 9 | Chocolate | 2 | 18 | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
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| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

Like taste



| Food Item | Number of Students |
|-------------|--------------------|
| Cookie | 20 |
| Grapefruit | 5 |
| Potato Chip | 20 |
| Sugar Cube | 10 |
| Dill Pickle | 3 |
| Lemon | 1 |
| Pretzel | 15 |
| Chocolate | 2 |

Do not like tastes



| Food Item | Number of Students |
|-------------|--------------------|
| Cookie | 0 |
| Grapefruit | 15 |
| Potato Chip | 0 |
| Sugar Cube | 10 |
| Dill Pickle | 17 |
| Lemon | 19 |
| Pretzel | 5 |
| Chocolate | 18 |

Name _____

Tasting Prediction Sheet

Kinds of taste we will use today:

Sweet salty sour bitter

Predict how each item will taste:

Cookie _____

Grapefruit Rind _____

Potato Chip _____

Sugar Cube _____

Dill Pickle _____

Lemon _____

Pretzel _____

Chocolate _____