

Classifying Candy 2

Task Information

Grade: 4th grade

Content: process skills

Format: manipulative

Purpose:

The student will develop a binary classification system using concrete objects.

Skills:

Primary: classifying

Secondary: observing

Time: 10 minutes

Materials:

- 1 sandwich bag with 13 - 15 pieces of candy
An example would be an assortment of both hard and soft candy
- red striped peppermint
- butterscotch disc
- caramel
- root beer barrel
- green sour ball
- blue square mint
- Tootsie rolls (traditional chocolate & flavored)
- green striped wintergreen
- red square anise flavor
- red cinnamon ball
- green tropical flavored disc
- sugar filled caramel (round)
- An odd number of pieces is best. This eliminates the assumption that groups must be of equal number.
- It is also suggested that the candy sample not include doubles of any one candy.

Preparation:

Prepare 1 bag of candy for each student. Any selection of candy is valid as long as it contains items of various shape, color, wrappers, texture....etc.

Safety:

The students should be instructed not to eat any of the candy.

Extensions and Modifications:

Classifying Candy 1 and 3

Classifying Candy 2

Task: At this station you will be putting candy into groups

Materials:

- Candy bag
- test card

Directions:

- A. Place all of the candy on the test card in the box labeled **Place Candy Here**.
- B. Using the test card as your guide, divide all the candies into two (2) groups, group 1 and group 2.
- C. All of the candies in group 1 must have the same property and all of the candies in group 2 must have the same property.
- D. Use all the candy.

Questions

1. What property does the candy in group 1 have?

2. What property does the candy in group 2 have?

Directions

- E. Next, using the test card as your guide, divide group 1 into two (2) groups, A and B, so that all of the candy in each of the new groups has the same property.
- F. Use all of the candy in Group 1.

Questions

3. What property does the candy in Group A have?

4. What property does all the candy in Group B have?

Please Continue on the Next Page

Directions

- G. Next go back to **group 2**. Using the test card as your guide, divide **group 2** into two (2) groups, C and D, so that **all** of the candy in **each** of the new groups has the same property.
- H. Use **all** of the candy in group 2.

Questions

5. What property does the candy in Group C have?

6. What property does the candy in Group D have?

Place Candy Here

Group 1

Group 2

Group A

Group B

Group C

Group D

Classifying Candy 2- Scoring Rubric

Maximum Score - 6 points

*** A sample picture of the candy is included for your convenience.

1. & 2 Groups 1 and 2

2 points total

Standard: The student will classify objects into two(2) groups, 1 and 2.

Criteria:

- 1 point if the student identifies a property that is common to all of the candy in **Group 1**.
- 1 point if the student identifies a property that is common to all of the candy in **Group 2**.

The student identifies a property of the candy in group 2 that is different from the candy in Group 1.

It does not have to be the opposite property identified for Group 1 as long as all of the candy are used and they are all sorted into two distinct groups.

It is acceptable to have Group 1 be one property and Group 2 be not that property. for example: red and not red or square and not square.

If in doubt the rater may attempt to sort all of the candy into the two (2) groups identified by the student.

Examples of acceptable properties:

- | | | | |
|--------------|----------------|-----------|---------|
| • hard | • soft | • big | • small |
| • same color | • same wrapper | • striped | • round |
| • flat | • square | | |

3. & 4 Groups A and B

2 points total

Standard: The student will classify the objects in Group 1 into two(2) groups, A and B.

Criteria:

- 1 point if the student identifies a property which all the candy in **Group A** have in common.

The student selects a property that is different from those selected in Groups 1 and 2 that all the candy in Group A have in common.

- 1 point if the student identifies a property which all the candy in **Group B** have in common.

The student identifies a property of the candy in the Group B that is different from the candy in the Group A .

It does not have to be the opposite of the property identified for Group A as long as all the remaining candy are used and they are all sorted into two(2) distinct groups.

It is acceptable to have Group A be one property and the Group B be not that property. for example: red and not red or square and not square.

If in doubt the rater may attempt to sort all of the candy into the two (2) groups identified by the student.

Examples of acceptable properties:

- see acceptable responses from question #1. & 2.

5. & 6 Groups C and D**2 points total**

Standard: The student will classify the objects in Group 2 into two(2) groups C and D.

Criteria:

- 1 point if the student identifies a property which **all** the candy in **Group C** have in common.

The student selects a property that is **different** from those selected in Groups 1 and 2 that **all** the candy in the new Group C have in common.

- 1 point if the student identifies a property which **all** the candy in **Group D** have in common.

The student identifies a property of the candy in the new Group D that is **different** from the candy in the new Group C .

It does not have to be the opposite of the property identified for new Group C as long as **all** the remaining candy are used and they are **all** sorted into two(2) distinct groups.

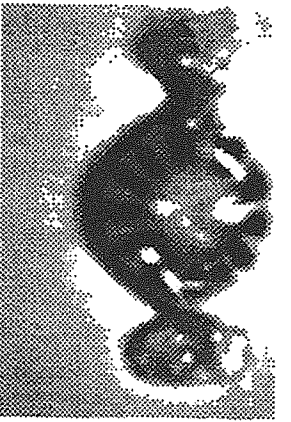
It is acceptable to have Group C be one property and the Group D be **not** that property. for example: red and **not** red or square and **not** square.

If in doubt the rater may attempt to sort **all** of the candy into the two (2) groups identified by the student.

Examples of acceptable properties:

- see acceptable responses from question #1. & 2.

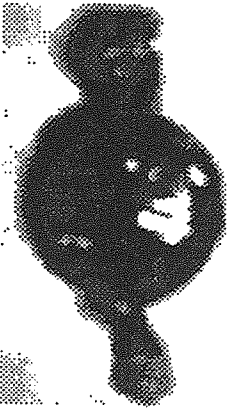
Highest possible score - 6 points



red striped peppermint



green striped tropical fruit disc



butterscotch disk



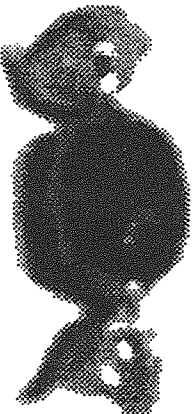
green striped wintergreen



green sour ball



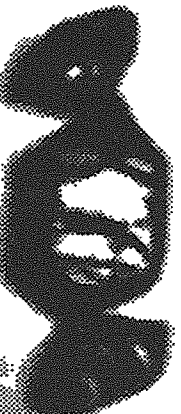
striped cinnamon ball (red)



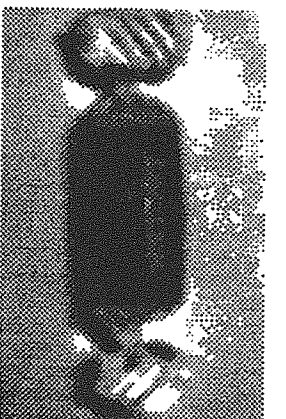
striped rootbeer barrel



square blue mint



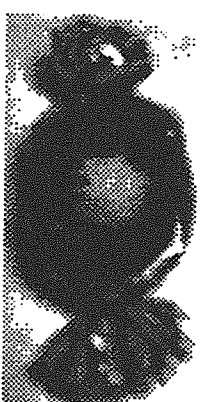
square red anise flavor



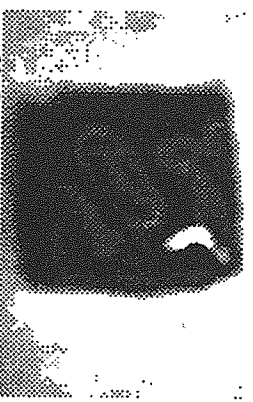
traditional brown



lime flavor (green)



sugar filled caramel



light brown caramel



Student ID _____ Scoring Form - Classifying Candy 2

Male / Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

1. & 2. Group 1 and Group 2 properties 0 1 2

3. & 4. Group A and Group B properties 0 1 2

5. & 6. Group C and Group D properties 0 1 2

Total Score _____

Total possible score - 6 points

Student ID _____ Scoring Form - Classifying Candy 2

Male / Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

1. & 2. Group 1 and Group 2 properties 0 1 2

3. & 4. Group A and Group B properties 0 1 2

5. & 6. Group C and Group D properties 0 1 2

Total Score _____

Total possible score - 6 points

Male Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

- 1. & 2. Group 1 and Group 2 properties 0 1 2
- 3. & 4. Group A and Group B properties 0 1 2 # 4 incomplete
- 5. & 6. Group C and Group D properties 0 1 2 Same property as groups 1 and 2

Total Score 3 pts
Total possible score - 6 points

#2 Male Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

- 1. & 2. Group 1 and Group 2 properties 0 1 2
- 3. & 4. Group A and Group B properties 0 1 2
- 5. & 6. Group C and Group D properties 0 1 2

Total Score 4 pts
Total possible score - 6 points

Male / Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

1. & 2. Group 1 and Group 2 properties 0 1 2

3. & 4. Group A and Group B properties 0 1 2

5. & 6. Group C and Group D properties 0 1 2

Total Score 6pts
Total possible score - 6 points

Male / Female (circle one)

Circle the student's score for each question. Add the points for each question and write the total score at the bottom of the scoring form.

1. & 2. Group 1 and Group 2 properties 0 1 2

3. & 4. Group A and Group B properties 0 1 2

5. & 6. Group C and Group D properties 0 1 2

Total Score _____
Total possible score - 6 points

Classifying Candy 2

Task: At this station you will be putting candy into groups

M

Materials:

- 8 pieces of candy
- test card

4B-DE-6

#2

Directions:

- Place all of the candy on the test card in the box labeled Place Candy Here.
- Using the test card as your guide, divide all the candies into two (2) groups, group 1 and group 2.
- All of the candies in group 1 must have the same property and all of the candies in group 2 must have the same property.
- Use all the candy.

Questions

1. What property does the candy in group 1 have?

The candy is round in a way

2. What property does the candy in group 2 have?

there strate one all sides of the candy

Directions

- Next, using the test card as your guide, divide group 1 into two (2) groups, A and B, so that all of the candy in each of the new groups has the same property.
- Use all of the candy in Group 1.

Questions

3. What property does the candy in Group A have?

the candy is not totally round

4. What property does all the candy in Group B have?

the candy is totally round

Directions

- Next go back to group 2. Using the test card as your guide, divide group 2 into two (2) groups, C and D, so that all of the candy in each of the new groups has the same property.
- Use all of the candy in group 2.

Questions

5. What property does the candy in Group C have?

look like bricks

6. What property does the candy in Group D have?

look like they wouldn't be very good bricks

Classifying Candy 2

Task: At this station you will be putting candy into groups

Materials:

- 8 pieces of candy
- test card

4B-DE-2

#1

Directions:

- A. Place all of the candy on the test card in the box labeled Place Candy Here.
- B. Using the test card as your guide, divide all the candies into two (2) groups, group 1 and group 2.
- C. All of the candies in group 1 must have the same property and all of the candies in group 2 must have the same property.
- D. Use all the candy.

Questions

1. What property does the candy in group 1 have?

hard

2. What property does the candy in group 2 have?

hard and soft

Directions

- E. Next, using the test card as your guide, divide group 1 into two (2) groups, A and B, so that all of the candy in each of the new groups has the same property.
- F. Use all of the candy in Group 1.

Questions

3. What property does the candy in Group A have?

hard circle

4. What property does all the candy in Group B have?

hard

Directions

- G. Next go back to group 2. Using the test card as your guide, divide group 2 into two (2) groups, C and D, so that all of the candy in each of the new groups has the same property.
- H. Use all of the candy in group 2.

Questions

5. What property does the candy in Group C have?

soft

6. What property does the candy in Group D have?

hard

Classifying Candy 2

Task: At this station you will be putting candy into groups

Materials:

- 8 pieces of candy
- test card

F
4B-DE-4
#3

Directions:

- Place all of the candy on the test card in the box labeled Place Candy Here.
- Using the test card as your guide, divide all the candies into two (2) groups, group 1 and group 2.
- All of the candies in group 1 must have the same property and all of the candies in group 2 must have the same property.
- Use all the candy.

Questions

1. What property does the candy in group 1 have?

Circle like shapes

2. What property does the candy in group 2 have?

not circle shapes

Directions

- Next, using the test card as your guide, divide group 1 into two (2) groups, A and B, so that all of the candy in each of the new groups has the same property.
- Use all of the candy in Group 1.

Questions

3. What property does the candy in Group A have?

Flat circle like shapes

4. What property does all the candy in Group B have?

fat circle like shapes

Directions

- Next go back to group 2. Using the test card as your guide, divide group 2 into two (2) groups, C and D, so that all of the candy in each of the new groups has the same property.
- Use all of the candy in group 2.

Questions

5. What property does the candy in Group C have?

does have writing on the wrapper

6. What property does the candy in Group D have?

does not have writing on the wrapper