

# Classifying Candy 3

## Task Information

**Grade:** 4th grade

**Content:** process skills

**Format:** manipulative

**Purpose**

The student will create a classification tree based on grouping candy using eight (8) different properties.

**Skills:**

**Primary:** classifying

**Secondary:** observing

**Time:** 10 - 15 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 2

## Classifying Candy 3

**Task:** At this station you will be creating a classification tree.

### Materials

- Candy bag
- Candy Tree - test card

### Directions

- Place **all** of the candy on the Candy Tree in the box labeled **Place Candy Here**.
- Using the Candy Tree 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?

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

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### Directions

- Using the Candy Tree as your guide, divide groups 1 and 2 into four (4) new groups, A, B, C, and D so that **all** of the candies in **each** group have the **same** property.
- Use **all** the candies.

### Questions

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

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4. What property does the candy in group B have?

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

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

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Please Continue on the Next Page

G. Using the Candy Tree as your guide, divide groups A, B, C, and D into eight (8) more groups, #1 - #8, so that all of the candies in each group have the same property.

H. Use all the candies.

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

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

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9. What property does the candy in group #3 have?

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10. What property does the candy in group #4 have?

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11. What property does the candy in group #5 have?

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12. What property does the candy in group #6 have?

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13. What property does the candy in group #7 have?

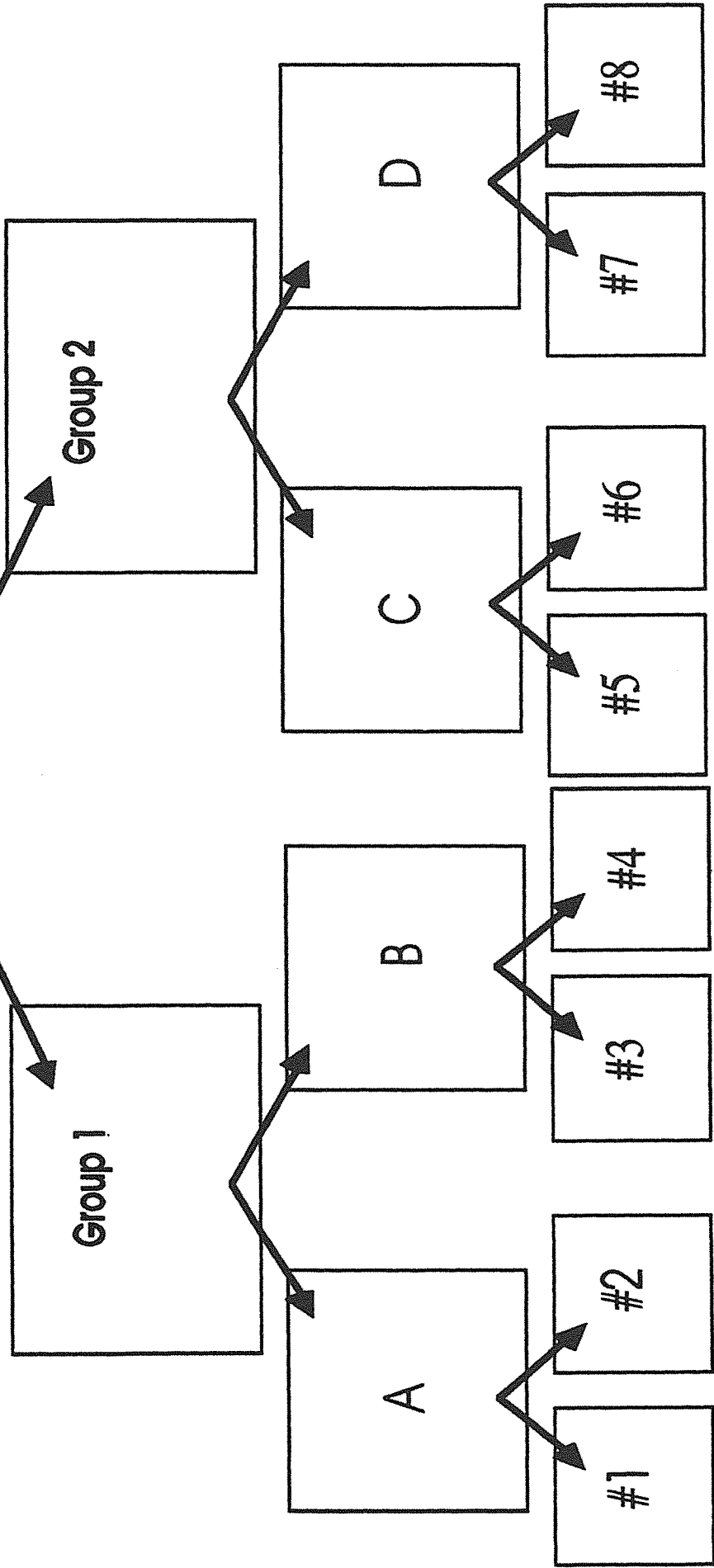
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14. What property does the candy in group #8 have?

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# Candy Tree

Place Candy Here



This is a smaller version of the Test Card for Classifying Candy 3.  
A 12" X 18" or larger piece of paper is necessary for this test card.



# Classifying Candy 3 - Scoring Rubric

Maximum score - 14 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.

**Examples of acceptable properties:**

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

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.

## 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 Group B that is different from the candy in Group A .

**Examples of acceptable properties:**

- see acceptable responses from question #1.

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.



**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 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 Group D that is different from the candy in Group C .

**Examples of acceptable properties:**

- see acceptable responses from question #1.

It does not have to be the opposite of the property identified for 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.

**7. & 8. Groups #1, and #2****2 points total**

**Standard;** The Student will classify the objects in Group A into two (2) groups, #1 and #2.

**Criteria:**

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

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

- 1 point if the student identifies a property which all the candy in **Group #2** has in common.

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

**Examples of acceptable properties:**

- see acceptable responses from question #1.

It does not have to be the opposite of the property identified for Group #1 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 #1 be one property and the 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.



**9. & 10. Groups #3 and #4****2 points total**

**Standard;** The Student will classify the objects in Group a into two (2) groups, #3 and #4.

**Criteria:**

- 1 point if the student identifies a property which **all** the candy in Group #3 has in common.

The student selects a property that is **different** from those selected in Groups A and B that **all** the candy in Group #3 have in common.

- 1 point if the student identifies a property which **all** the candy in Group #4 has in common.

The student identifies a property of the candy in Group #4 that is **different** from the candy in Group #3 .

**Examples of acceptable properties:**

- see acceptable responses from question #1.

It does not have to be the opposite of the property identified for Group #3 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 #3 be one property and the Group #4 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.

**11. & 12.. Groups #5 and #6****2 points total**

**Standard;** The Student will classify the objects in Group a into two (2) groups, #5 and #6.

**Criteria:**

- 1 point if the student identifies a property which **all** the candy in Group #5 has in common.

The student selects a property that is **different** from those selected in Groups C and D that **all** the candy in Group #5 have in common.

- 1 point if the student identifies a property which **all** the candy in Group #6 has in common.

The student identifies a property of the candy in Group #6 that is **different** from the candy in Group #5 .

**Examples of acceptable properties:**

- see acceptable responses from question #1.

It does not have to be the opposite of the property identified for Group #5 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 #5 be one property and the Group #6 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.

**13. & 14. Groups #7 and #8****2 points total**

**Standard;** The Student will classify the objects in Group a into two (2) groups, #7 and #8.

**Criteria:**

- 1 point if the student identifies a property which **all** the candy in Group #7 has in common.

The student selects a property that is **different** from those selected in Groups C and D that **all** the candy in Group #7 have in common.

- 1 point if the student identifies a property which **all** the candy in Group #8 has in common.

The student identifies a property of the candy in Group #8 that is **different** from the candy in Group #7 .

**Examples of acceptable properties:**

- see acceptable responses from question #1.

It does not have to be the opposite of the property identified for Group #7 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 #7 be one property and the Group #8 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.

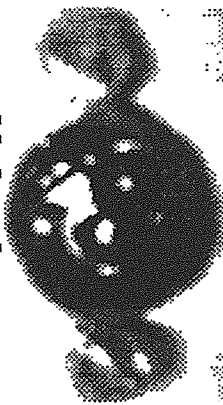
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**Highest possible score - 14 points**





red striped peppermint



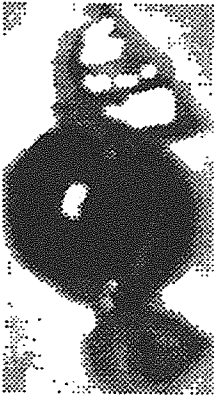
green striped tropical fruit disc



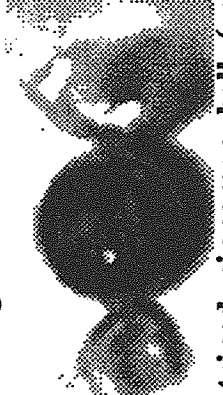
butterscotch disc



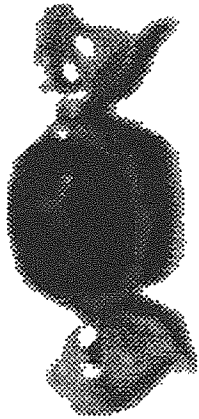
green striped wintergreen



green sour ball



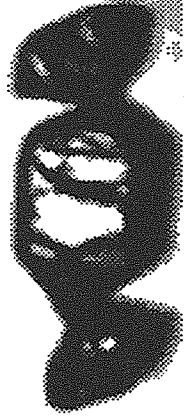
striped cinnamon ball (red)



striped rootbeer barrel



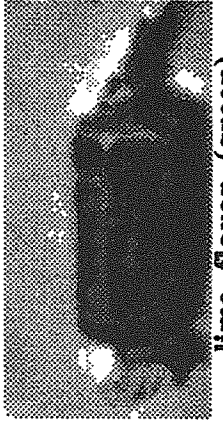
square blue mint



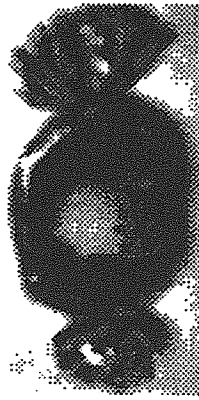
square red anise flavor



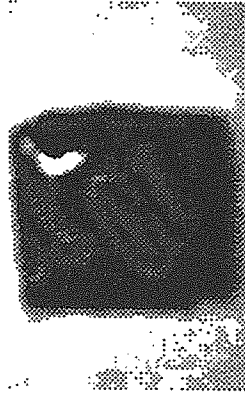
traditional brown



lime flavor (green)



sugar filled caramel



light brown caramel

Student ID \_\_\_\_\_ Scoring Form - Classifying Candy 3

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
7. & 8.	Group #1 and Group #2 properties	0	1	2
9. & 10.	Group #3 and Group #4 properties	0	1	2
11. & 12.	Group #5 and Group #6 properties	0	1	2
13. & 14.	Group #7 and Group #8 properties	0	1	2

**Total Score** \_\_\_\_\_  
Total possible score - 14 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	<u>2</u>
3. & 4.	Group A and Group B properties * left out carmel creme	0	<u>1</u>	2
5. & 6.	Group C and Group D properties	0	1	<u>2</u>
7. & 8.	Group #1 and Group #2 properties	<u>0</u>	1	2
9. & 10.	Group #3 and Group #4 properties	<u>0</u>	1	2
11. & 12.	Group #5 and Group #6 properties	<u>0</u>	1	2
13. & 14.	Group #7 and Group #8 properties	<u>0</u>	1	2

groups  
don't  
make sense  
from  
groups  
A, B, C & D  
on.

Total Score 5pts  
Total possible score - 14 points

## Classifying Candy 3

**Task:** At this station you will be creating a classification tree.

M

4C-DE-4

#1

### Materials

- 15 pieces of candy
- Candy Tree - test card

### Directions

- A. Place all of the candy on the Candy Tree in the box labeled Place Candy Here.
- B. Using the Candy Tree 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?

you chew it.

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

you suck it

### Directions

- E. Using the Candy Tree as your guide, divide groups 1 and 2 into four (4) new groups, A, B, C, and D so that all of the candies in each group have the same property.
- F. Use all the candies.

### Questions

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

they are all square

4. What property does the candy in group B have?

same brand

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

they are circular

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

same wrapper

Please Continue on the Next Page



#2

Student ID 4C-CN-7 Scoring Form - Classifying Candy 3

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  
\* Did not use all the candy from group #1

5. & 6. Group C and Group D properties 0 1 2  
\* No round balls in soft group

7. & 8. Group #1 and Group #2 properties 0 1 2  
\* No green in Group A

9. & 10. Group #3 and Group #4 properties 0 1 2  
\* Did not use all the candy from Group B

11. & 12. Group #5 and Group #6 properties 0 1 2

13. & 14. Group #7 and Group #8 properties 0 1 2  
\* Tootsie Roll could be black

Total Score 7 pts  
Total possible score - 14 points

## Classifying Candy 3

**Task:** At this station you will be creating a classification tree.

4C-CN-7

### Materials

- 15 pieces of candy
- Candy Tree - test card

#2

### Directions

- A. Place all of the candy on the Candy Tree in the box labeled Place Candy Here.
- B. Using the Candy Tree 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?

All the candies are hard.

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

All of them are soft.

### Directions

- E. Using the Candy Tree as your guide, divide groups 1 and 2 into four (4) new groups, A, B, C, and D so that all of the candies in each group have the same property.
- F. Use all the candies.

### Questions

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

They are squares.

4. What property does the candy in group B have?

They are flat round.

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

They are round like a ball.

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

They are like cylinders.

Please Continue on the Next Page



#1  
G. Using the Candy Tree as your guide, divide groups A, B, C, and D into eight (8) more groups, #1 - #8, so that all of the candies in each group have the same property.

H. Use all the candies.

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

Bright lines

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

can't see the candy

13. What property does the candy in group #3 have?

round

14. What property does the candy in group #4 have?

squares

15. What property does the candy in group #5 have?

colorful wrappers

16. What property does the candy in group #6 have?

brown square

17. What property does the candy in group #7 have?

red, white and black wrapper

18. What property does the candy in group #8 have?

taste like pap

4C-DE-4

#2

G. Using the Candy Tree as your guide; divide groups A, B, C, and D into eight (8) more groups, #1 - #8, so that all of the candies in each group have the same property.

H. Use all the candies.

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

They are green.

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

The colors are blue

13. What property does the candy in group #3 have?

The colors are red

14. What property does the candy in group #4 have?

yellow colors

15. What property does the candy in group #5 have?

orange colors

16. What property does the candy in group #6 have?

brown colors

17. What property does the candy in group #7 have?

Black colors

18. What property does the candy in group #8 have?

redish colors

4C-CN-7

3

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) |
|           | $\downarrow$ $\downarrow$            |   |   |     |
|           | soft                    hard         |   |   |     |
| 3. & 4.   | Group A and Group B properties       | 0 | 1 | (2) |
| 5. & 6.   | Group C and Group D properties       | 0 | 1 | (2) |
| 7. & 8.   | Group #1 and Group #2 properties     | 0 | 1 | (2) |
| 9. & 10.  | Group #3 and Group #4 properties     | 0 | 1 | (2) |
|           | $\downarrow$                         |   |   |     |
|           | nothing because Group B had 1 object |   |   |     |
| 11. & 12. | Group #5 and Group #6 properties     | 0 | 1 | (2) |
| 13. & 14. | Group #7 and Group #8 properties     | 0 | 1 | (2) |

Total Score 14 pts  
 Total possible score - 14 points

The student must have put the soft candy in group 1 and the hard candy in group 2 otherwise the rest of his classification would make no sense. I made an allowance for that switch.



### Classifying Candy 3

**Task:** At this station you will be creating a classification tree.

M

**Materials**

- 15 pieces of candy
- Candy Tree - test card

4C-DE-2

#3

**Directions**

- Place all of the candy on the Candy Tree in the box labeled Place Candy Here.
- Using the Candy Tree 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**

- What property does the candy in group 1 have?  
they are hard candies
- What property does the candy in group 2 have?  
softer candy

**Directions**

- Using the Candy Tree as your guide, divide groups 1 and 2 into four (4) new groups, A, B, C, and D so that all of the candies in each group have the same property.
- Use all the candies.

**Questions**

- What property does the candy in group A have?  
brown candy
- What property does the candy in group B have?  
green candy
- What property does the candy in group C have?  
fully colored
- What property does the candy in group D have?  
has a little whigt on them

Please Continue on the Next Page

G. Using the Candy Tree as your guide, divide groups A, B, C, and D into eight (8) more groups, #1 - #8, so that all of the candies in each group have the same property.

#3

H. Use all the candies.

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

chocolat

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

carmal

13. What property does the candy in group #3 have?

green

14. What property does the candy in group #4 have?

nothing because I in B

15. What property does the candy in group #5 have?

cool colors

16. What property does the candy in group #6 have?

hot colors

17. What property does the candy in group #7 have?

mostly whigt

18. What property does the candy in group #8 have?

mostly dark

4C-DE-2