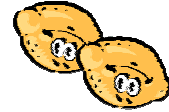




Cherries Are Positive, Lemons Are Negative Activity Sheet



Names _____ and _____

MA.A.3.3.1- The student understands and explains the effects of addition, subtraction, multiplication, and division on whole numbers, fractions, including mixed numbers, and decimals, including the inverse relationships of positive and negative numbers.

Remember:

- 1 cherry head represents Positive 1 (+1)
- 1 lemon head represents Negative 1 (-1)
- 1 cherry head and 1 lemon head represent Zero (0)

Adding Positive Integers

1. Place three cherry heads on the paper plate. Then, place four cherry heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?
2. Place five cherry heads on the paper plate. Then, place two cherry heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?
3. Place one cherry head on the paper plate. Then, place one cherry head on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?
4. When combining one amount of cherry heads to another amount of cherry heads, did you end up with any cherry heads? If so, when?

Did you end up with any lemon heads? If so, when?

5. Based on your findings, come up with a rule (or rules) for adding positive integers.

Adding Negative Integers

6. Place six lemon heads on the paper plate. Then, place one lemon head on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?

7. Place two lemon heads on the paper plate. Then, place four lemon heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?

8. Place three lemon heads on the paper plate. Then, place three lemon heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?

9. When combining one amount of lemon heads to another amount of lemon heads, did you end up with any lemon heads? If so, when?

Did you end up with any cherry heads? If so, when?

10. Based on your findings, come up with a rule (or rules) for adding negative integers.

Adding Positive and Negative Integers

11. Place six cherry heads on the paper plate. Then, place two lemon heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?

12. Place one cherry head on the paper plate. Then, place five lemon heads on the paper plate.
 - a. Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - b. What is left on your paper plate?
 - c. What integer does this represent?

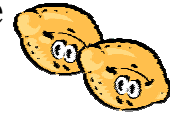
13. Place eight lemon heads on the paper plate. Then, place four cherry heads on the paper plate.
- Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - What is left on your paper plate?
 - What integer does this represent?
14. Place seven lemon heads on the paper plate. Then, place ten cherry heads on the paper plate.
- Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - What is left on your paper plate?
 - What integer does this represent?
15. Place six cherry heads on the paper plate. Then, place six lemon heads on the paper plate.
- Do you have any pairs of one cherry head and one lemon head? If so, take them away because they represent ____.
 - What is left on your paper plate?
 - What integer does this represent?
16. When combining one amount of lemon heads to another amount of cherry heads (or vice versa), did you end up with any lemon heads? If so, when?

Did you end up with any cherry heads? If so, when?

17. Based on your findings, come up with a rule (or rules) for adding positive and negative integers.



Rubric for Cherries are Positive, Lemons are Negative



Criteria	Commendable	Acceptable	See Teacher
Cooperative Work	Works cooperatively with partner without problems	Works with partner with few problems	Refuses to cooperate with partner
Adding Positive Integers	Makes a clear rule for adding positive integers	Attempts to make a rule for adding positive integers	Does not make a rule for adding positive integers
Adding Negative Integers	Makes a clear rule for adding negative integers	Attempts to make a rule for adding negative integers	Does not make a rule for adding positive integers
Adding Positive and Negative Integers	Makes a clear rule for adding positive and negative integers	Attempts to make a rule for adding positive and negative integers	Does not make a rule for adding positive and negative integers