**Unit 2 Journal**

**Complete the following as you come to them in class.**

**(Days 1-2) What are the steps you use to solve a problem?** Identify the problem, find a solution, execute the solution, retest the problem

**(Day 3) How is solving this kind of problem the same/different from how you solve a problem in “real life”?**

**(Days 10-12) How high can you count with your ten fingers?** 10 unless you use sign language

**(Days 10-12) What message is being sent with the Christmas tree lights?**

**(Days 15-16) List examples of where it matters whether items are in order (sorted).** during a binary search, or sorting through an alphabetical list such as a phonebook.

**(Days 1-2 Solving A Community Issue)**

the city council wants to make a cleaner city, what info would they need?

# of trash cans around the city.

pay attention to the landfill size and % used

find out how much it would cost

collection schedule, location, and time

consult citizens on what they want

**(Day 3 Candy Bar Activity)**

11 cut for 12 equal pieces

cut the bar in half, resulting in two equal pieces, then cut the first piece in half, resulting in 3 pieces, curt the large piece in half, resulting in 4 equal pieces, continue until you have 12 equal pieces

**(Days 10-12 Binary CS Unplugged activities)**

help I'm trapped

00001000

00000101

00001100

00010000

00000000

00001001

00001101

00000000

00010100

00010010

00000001

00010000

00010000

00000101

00000100

8 5 12 16 0 9 13 0 20 18 1 16 16 5 4

Morse code numbers

01001 9

1010 10

10001 17

10 2

11111 31

**(Days 13-14 Tower Activity)**

LEGO tower

5 stack

week 1: 2 stacks of 2, 1 left over

week 2: 1 stack of 4, 1 left over

week 3. 1 stack of 5

10 stack

week 1. 5 stacks of 2

week 2: 2 stacks of 4, 1 stack of 2

week 3. 1 stack of 8, 1 stack of 2

week 4: 1 stack of 10

20 stack

week 1: 10 stacks of 2

week 2. 5 stacks of 4

week 3. 2 stacks of 8, 1 stack of 2

week 4: 1 stack of 16, 1 stack of 2

week 5: 1 stack of 20

100 stack

week 1-5: create 5 20 stacks

week 6: 2 stacks of 40, 1 stack of 20

week 7. 1 stacks of 80, 1 stack of 20

week 8. 1 stack of 100