## Add/Sub Integers

Thursday, September 19, 2019 11:44 AM
$\qquad$ Blk: $\qquad$
$\square \mathrm{I}$ can add/subtract integers = level 2
$\square$ I can model the addition/subtraction of integers $=$ level $3 / 4$

## 1. Number Lines

- Number lines are a useful way to model addition and subtraction
- Number lines are always written such that the numbers get more posiffre as you move to the right and more negatre as you move to the left


Eg. $3+8=11$

$$
\begin{aligned}
& \text { Start at } \frac{3}{}+8=\text { move } 8 \text { spaces to the ghtyeft }
\end{aligned}
$$



Eg. $3-8=-5$
Start at 3
$-8=$ move 8 spaces to the right(eft)


Eg. $-3+8=5$

- Start at -3
$+8=$ move 8 spaces to the right $/$ left
Eg. $-3-8=-11$
Start at - 3
$-8=$ move 8 spaces to the right left

**Double Signs**
- Whenever you see a double sign, change it to a single sign
- $++/-\rightarrow+$
- +-/- + $\rightarrow$ -

Eg. $6+(-4)=6-4=2$

2. Colored Tiles


- Shaded tiles (usually red) $=0=$ NEGATIVEnumbers
- White tiles $=0$ =POSITIVE numbers
- Zero Pair $=00=2$ ERO TO GETHER
- First number indicates how many tiles you start with and what color they are
- +/- indicates if you are adding tiles or removing them
- Second number indicates how many tiles and what color

| Eg. $4+7=11$ <br> - Start with 4 red/whitt tiles <br> - Adg Remove 7 red/white tiles $\begin{array}{llll} 00 & 000 & 11 \\ 00 & 0 & 0 & 0 \\ 0 & & \end{array}$ | Eg. $4-7=-3$ <br> - Start with 4 red whity tiles <br> - Add eemove 7 red white tiles |
| :---: | :---: |
| Eg. $-4+7=3$ <br> - Start with 4 red)white tiles <br> - Add)Remove 7 red/fite tiles $\begin{aligned} & 6 \phi 080 \\ & 6 \phi 00 \end{aligned}$ | $\text { Eg. }-4-7=-11$ <br> - Start with 4 red) white tiles <br> - Add Remo e 7 redwhite tiles |
| Eg. $9+(-4)=5$ <br> - Start with 9 red/White iles <br> - Add Remove 4 red/bwite tiles | Eg. 9-4 = <br> - Start with 9 red/white tiles <br> - Add/Remoy 4 red/white tiles <br> 5 |

