$\qquad$ Date: $\qquad$ Period: $\qquad$ Everudary ©nequalttrea

Inequalities are often found in our everyday lives. The phrases "at most", "at least", and "no more than" are just a few ways we express inequalities - times when there may be more than one option or solution. For each real world situation below, draw a number line to help you determine how the algebraic inequality should look. Consider the following:

- What might be some possible solutions?
- Is the given number included in my solution set?
- Which way should the arrow point to include these possible solutions?
- Does my inequality make sense?


| Problem | Possible Solutions? | Number Line | Inequality |
| :---: | :---: | :---: | :---: |
| 1. To buy a ticket to the fair, you must have at least \$5 |  | $\longleftrightarrow$ ¢ $1+1$ |  |
| 2. To enter the kids' pool, you must be less than 4 feet tall |  | $\longleftrightarrow \longrightarrow$ |  |
| 3. The admission price of a movie is above $\$ 8.50$ |  | $\longleftrightarrow \longrightarrow$ |  |
| 4. Luckily, your math test has fewer than 23 questions |  | $\longleftrightarrow \longrightarrow$ |  |
| 5. Each arcade game charges more than 1 token |  | $\longleftrightarrow \sim$ |  |
| 6. Gym class is no more than a half hour |  | $\longleftrightarrow \sim$ |  |
| 7. To receive an A in math, you need a grade above an $82 \%$ on your final exam |  | $\longleftrightarrow \longrightarrow$ |  |
| 8. The meteorologist said the temperature would be lower than $65^{\circ} \mathrm{F}$ today |  | $\stackrel{\perp}{\longleftrightarrow}$ |  |

$\qquad$ Date: $\qquad$ Period: $\qquad$

| Problem | Possible Solutions | Number Line | Inequality |
| :---: | :---: | :---: | :---: |
| 9. You get paid no less than \$32 for mowing the lawn |  | $\longleftrightarrow$ - , 1-1 |  |
| 10. You must be at least 4.5 feet tall to ride the roller coaster |  | $\longleftrightarrow$ - |  |
| 11. You have more than 200 Instagram followers \#famous |  | $\longleftrightarrow$ 1-1 |  |
| 12. Starbucks hot chocolate costs at least $\$ 3.00$ |  | $\longleftrightarrow$ ¢ 1 + |  |
| 13. There are fewer than 7 people in my study group |  | $\longleftrightarrow$ ¢ 1 , 1 |  |
| 14. My grandmother lives more than 2 miles away |  | $\longleftrightarrow$ - 1 + 1 |  |
| 15. My birthday is fewer than 10 days away |  | $\longleftrightarrow$ - 1 + |  |

It's your turn! Create 5 of your own real-life inequalities.

| 16. |  | $\longleftrightarrow$ |  | $\mathrm{a}<$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 17. |  | $\longleftrightarrow$ |  | $\mathrm{~b}>$ |
| 18. |  | $\longleftrightarrow$ |  | $\mathrm{c} \geq$ |
| 19. |  | $\longleftrightarrow$ |  | $\mathrm{~d} \leq$ |
| 20. |  | $\longleftrightarrow$ |  |  |

