**The Kickflip**

**Part 1:**

In your groups, pool your knowledge about skateboarding. Answer the question: How is math used in skating?

* Write 3 sentences with 3 examples of how math is used in skating.

Ex.: A skater uses math to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Part 2:**

What does a skater need to think about when trying to complete a kickflip? Are there factors to consider? What are those?

* Write 2 sentences about what is important to completing a kickflip.

Ex.: A person must \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to do a kickflip.

 To do a kickflip, a person needs to be able to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Part 3:**

Hypothesize how high a person needs to ollie to complete a kickflip.

* Write 1-2 sentences on how high you think and why. Defend you hypothesis with some kind of evidence that you find online.

**Part 4:**

A person skateboarding must have roughly $\frac{1}{4}$ of a second while in the air to complete the rotation of a kickflip. For every inch that a person jumps they add $\frac{1}{48}$ of a second that they are in the air. How high must a person ollie to have enough time to complete a kickflip?

* Write an equation and solve for the variable. Make sure to label what each part represents.
* Write 1 sentence about what the answer means.
* Does this seem like a reasonable answer?