

UPCYCLE PLASTIC BAGS TO JUMP ROPES

Task Summary Sheet

Version	Description	Math Content
Warm Up A <i>One Jump Rope Only</i>	You want to make one jump rope. How many plastic bags do you need?	Multiplication (single digit) Rate (3 bags per foot) Measurement (length of rope in feet)
Warm Up B <i>One Jump Rope with Handles</i>	You want to make one jump rope. How many plastic bags do you need? How much duct tape do you need?	Multiplication (single digit) Rate (3 bags per foot) Measurement (length of rope in feet) Measurement (length of tape needed for handles, in inches)
Version A <i>Class Set</i>	We want to make a jump rope set for our class. A set contains jump ropes of different lengths. How many plastic bags will we need?	Multiplication (single digit and multi-digit, including larger products) Expressions with multiple terms (likely three or more terms for jump ropes of various lengths for various ages)
Version B <i>PE Class Set</i>	We want to make a jump rope set to be used during P.E. class. A set contains jump ropes of different lengths. How many plastic bags will we need?	Division (to divide total number of students into groups for different jumping configurations)
Version C <i>Community Center Set</i>	We want to make a jump rope set to donate to the <u>[insert] community center</u> . How many plastic bags will we need?	
Version D <i>School Wide Jump Rope Event</i>	We want to make enough jump ropes so that <u>all students at your _____ school</u> can participate in the school-wide jump rope event. How many plastic bags will we need?	Multiplication (single digit and multi-digit, including larger products) Expressions with multiple terms (likely three or more terms for jump ropes of various lengths) Division (to divide total number of students into groups for different jumping configurations) Measurement/Area (to determine number of people that can jump at the same time in a given space)

<p>Extension A</p> <p><i>Handles</i></p>	<p>You will use duct tape to make the jump rope handles. How much duct tape will you need for all the jump ropes included in your plan?</p>	<p>Measurement (length of tape needed for handles, in inches)</p> <p>Multiplication (to find total length needed, in inches, multi-digit multiplication)</p> <p>Division (to find number of number of jump ropes that can be made with a given length of duct tape i.e., one roll)</p>
<p>Extension B</p> <p><i>How many ropes can you make with this many bags?</i></p>	<p>Let's say we can collect _____ plastic bags.</p> <p>Come up with a plan to use these plastic bags to make jump ropes of different lengths for your school. How many jump ropes can we make?</p>	<p>Division (to find number of jump ropes of a given type that can be made with total number of bags)</p> <p>Division (to divide total number of bags into sets to use for jump ropes of different lengths)</p> <p>Reasoning about remainders (are leftover bags enough to make another rope)</p> <p>Expressions with multiple terms</p>
<p>Extension C</p> <p><i>Time to collect bags</i></p>	<p>How long will it take us to collect the plastic bags we need to implement our plan?</p>	<p>Data collection and analysis (gathering a sample data point – such as number of bags collected by one class in a given period of time – and using to predict number of bags collected by entire school)</p> <p>Multiplication (single digit and multi-digit)</p> <p>Division (divide total number of bags needed by number of bags collected in a given time period, to find total time needed)</p>