# Lesson 9: My Own Flag (Optional)

### Standards Alignments

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| Addressing | 5.NF.B.6 |
| Building Towards | 5.NF.B.6 |

### Teacher-facing Learning Goals

* Solve real world problems involving multiplication of fractions.

### Student-facing Learning Goals

* Let’s design our own flag.

### Lesson Purpose

The purpose of this lesson is for students to design a flag and use multiplication of fractions to determine how much fabric is needed to create the flag.

In this lesson, students are introduced to principles of flag design from the North American Vexillological Association. In the first activity, they make sense of what each principle means and see how they are applicable to a collection of given flags. In the second activity, they design their own flags, solve problems involving area and multiplication of fractions, and share their design with peers.

### Access for:

###  Students with Disabilities

* Engagement (Activity 2)

### Instructional Routines

MLR2 Collect and Display (Activity 1), Notice and Wonder (Warm-up)

### Materials to Gather

* Colored pencils or crayons: Activity 2
* Paper: Activity 2
* Rulers: Activity 2

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 20 min |
| Lesson Synthesis | 10 min |

### Teacher Reflection Question

Unlike talking, listening is a difficult thing to observe. At what points in the lesson did you observe students listening to one another’s ideas today in class? What indicators do you have that they were listening?