LESSON ACTIVITY:

Diffission

BY: MIRANDA SALGUERO

TIME REQUIRED: 45 minutes

MATERIALS:

For each student group:

- Hexagons recording page
- Diffission screenshot workspace
- Pattern blocks

For each student:

- Computer or tablet with internet access

For the Class:

- Large piece of paper

LEARNING OBJECTIVE:

Students will be able to create, name, and write fractions to build wholes in different ways.

CONTENT SPECIFIC LANGUAGE AND DEFINITIONS:

- Whole: the unit being partitioned into equal parts
- Equivalent: equal in value

PREPARATION:

Prepare two-sided copies of the hexagons recording sheet and Diffission screenshot workspace for each student.

Warm up: Making a trapezoid

Show a picture of a trapezoid and ask students to make this shape with different pattern blocks. After a couple minutes, ask students to report on their strategies and models.

Making the whole

Next, show students a hexagon and ask them to make a prediction of how many ways they could combine the pattern blocks to make a hexagon. Students should then work in pairs to make as many combinations as they can of the different pattern blocks and record their results on their recording sheet.

Finding equivalent fractions

Ask several pairs of students to share their strategy and work as a group on labelling these models as fractions to show that there are many ways to make the whole and that these fractions are equivalent.

Connection to Diffission

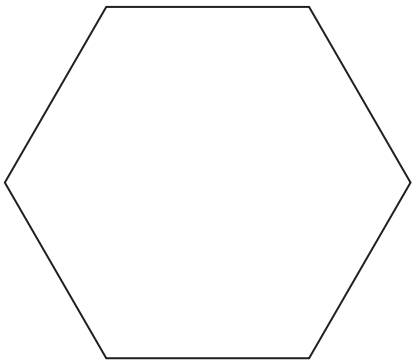
Show students the screenshot of Diffission and ask them to look at the back of their paper, prompting them to think of how many ways they could divide that rectangle into fractions. How many ways can they label each solution?

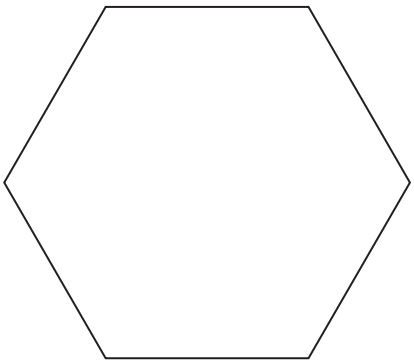
Note: While the making of hexagons may be easy for students, the labeling and explaining process might be more challenging. This could be a good experience to conduct as a class and then repeat with small groups.

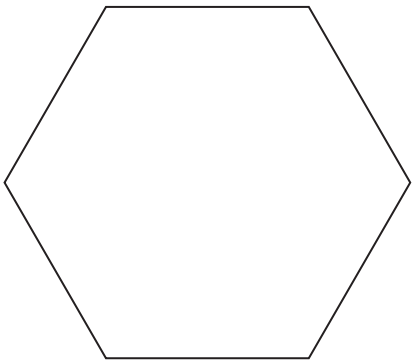
Dividing shapes into equal parts and labeling the fractions appropriately could also become a part of center work to provide students with more practice using the memory game included in this lesson plan.

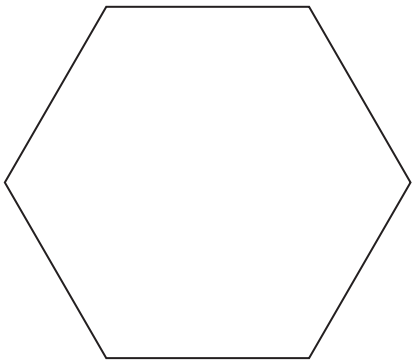
Hexagons Recording Page

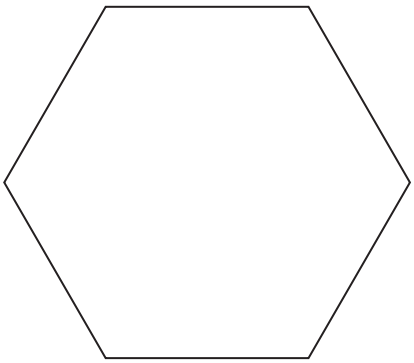
Record the different ways in which you built the hexagons. Write the fraction the whole represents.

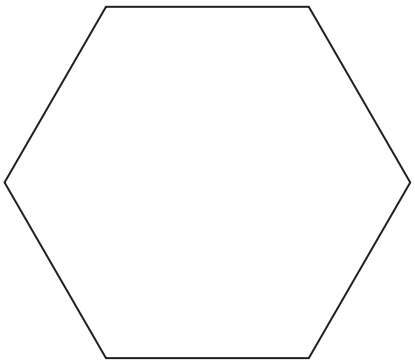






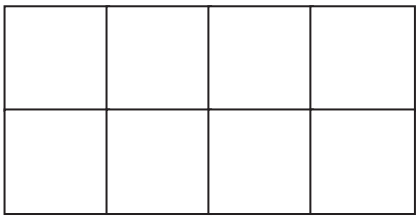






Diffission Screenshot Workspace

Record and label fractions of your rectangle.



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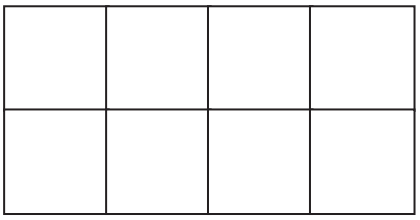

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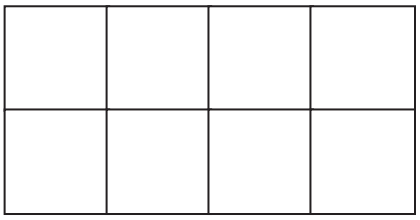

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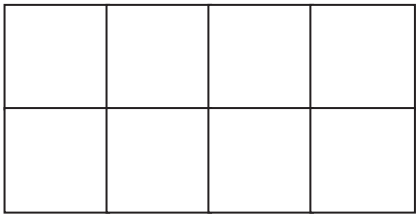

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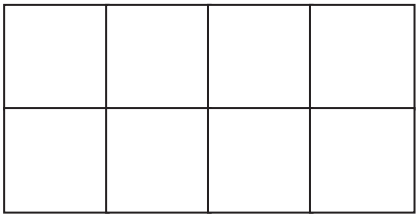

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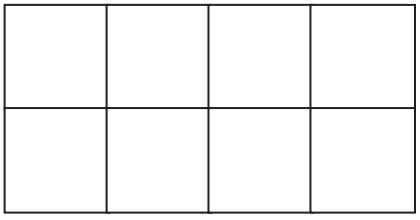

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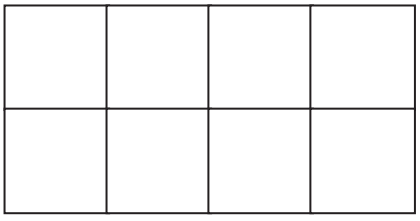

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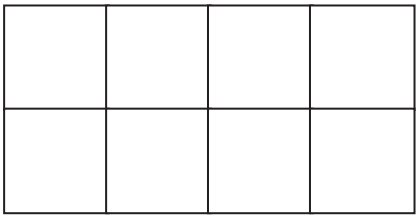

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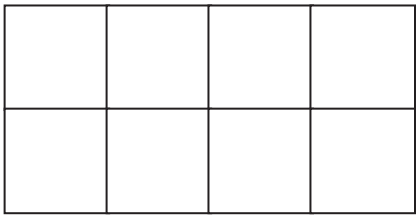

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