

Topic(s): Counting,
Probability

Concept(s): Number Sense

Mathematical Practice(s):
MP1, MP2, MP3, MP4,
MP5, MP6, MP7, MP8

Grade(s): 3rd 4th 5th 6th 7th
8th 9th 10th 11th 12th Low
Floor High Ceiling

Ice Cream Scoop

This is a really nice task as it is open to everyone, can be solved in different ways and can also extend to work in combinatorics – a nice way of organizing counting. Ask students to work on this task in groups, and to display their results on posters. Often we name students' different approaches and strategies.

Material:

- Pencils and Paper
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Task Instruction

In shops with lots of ice-cream flavors there are many different flavor combinations, even with only a 2-scoop cone. With 1 ice-cream flavor there is 1 kind of 2-scoop ice cream, but with 2 flavors there are 3 possible combinations (eg vanilla/vanilla, chocolate/chocolate, and vanilla/chocolate).

- How many kinds of 2-scoop cones are there with 10 flavors?
 - What about “n” flavors?
 - Create a poster that represents your group's thinking.
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