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Flipping out: calculating probability with a coin game.

Math. Teach. Middle Sch. 21, No. 4, 244-245 (2015).

Summary: In the author's experience with this activity, students struggle with the idea of representativeness in probability. Therefore, this student misconception is part of the classroom discussion about the activities in this lesson. Representativeness is related to the (incorrect) idea that outcomes that seem more random are more likely to happen. This probability activity builds on students' experience with the common practice of coin flipping. In particular, the activity addresses the grade 7 Common Core State Standards for Mathematics (CCSSM) in probability and statistics. Students calculate the probability of simple and compound events by using an organized list or probability tree. Additionally, the activity provides the opportunity for students to confront potential misconceptions about probability. (ERIC)

Classification: K53 D83
Keywords: probability; coin flipping; activities; probability tree
http://www.nctm.org/Publications/Mathematics-Teaching-in-Middle-School/2015/Vol21/Issue4/Flipping-Out_-Calculating-Probability-with-a-Coin-Game/