



SAMPLE MATERIAL

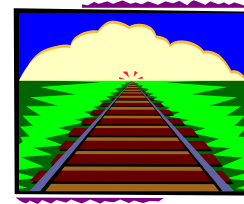
Fraction Tracks Game

Tollgate Elementary School of Expeditionary Learning, Colorado

Topic: Developing Effective Fractions Instruction for K-8

Practice: Fractions as Numbers

The *Fraction Tracks Game*, used in fifth-grade classes at Tollgate Elementary School of Expeditionary Learning, provides opportunities for students to use equivalent fractions, break fractions apart into unit fractions, and mentally add and subtract fractions with denominators 2, 3, 4, 5, 6, 8, or 10 as they try to move their game pieces from 0 to 1 along tracks labeled in various fractional divisions. Included here are the game boards, rules for a basic game play, and “extension” rules that provide more advanced practice.



Fraction Tracks

Materials: Game board, fraction cards, chips

The object of the game is to capture chips by landing exactly on 1 on any track. When a player lands on 1, the player wins the chip.

1. Start the game by placing one chip on each track, either at the beginning (0) of each track or at randomly selected points for fractions less than $\frac{3}{4}$.
2. Players take turns choosing a card from the deck. The fraction on the card is the total move a player must make using one or more chips. It does not indicate points to land on.
3. Move a chip or chips to total the amount shown on the card. The play can move on one track or on several tracks, but the total must equal the fraction on the card. If this cannot be done, the player must pass. A play may not “wrap around” and keep going on the same track within a turn.
4. When a player lands on 1, the player wins that chip. When a chip is won, place a new chip at 0 on the same track so the next player(s) has access to a chip on every track.

Extensions:

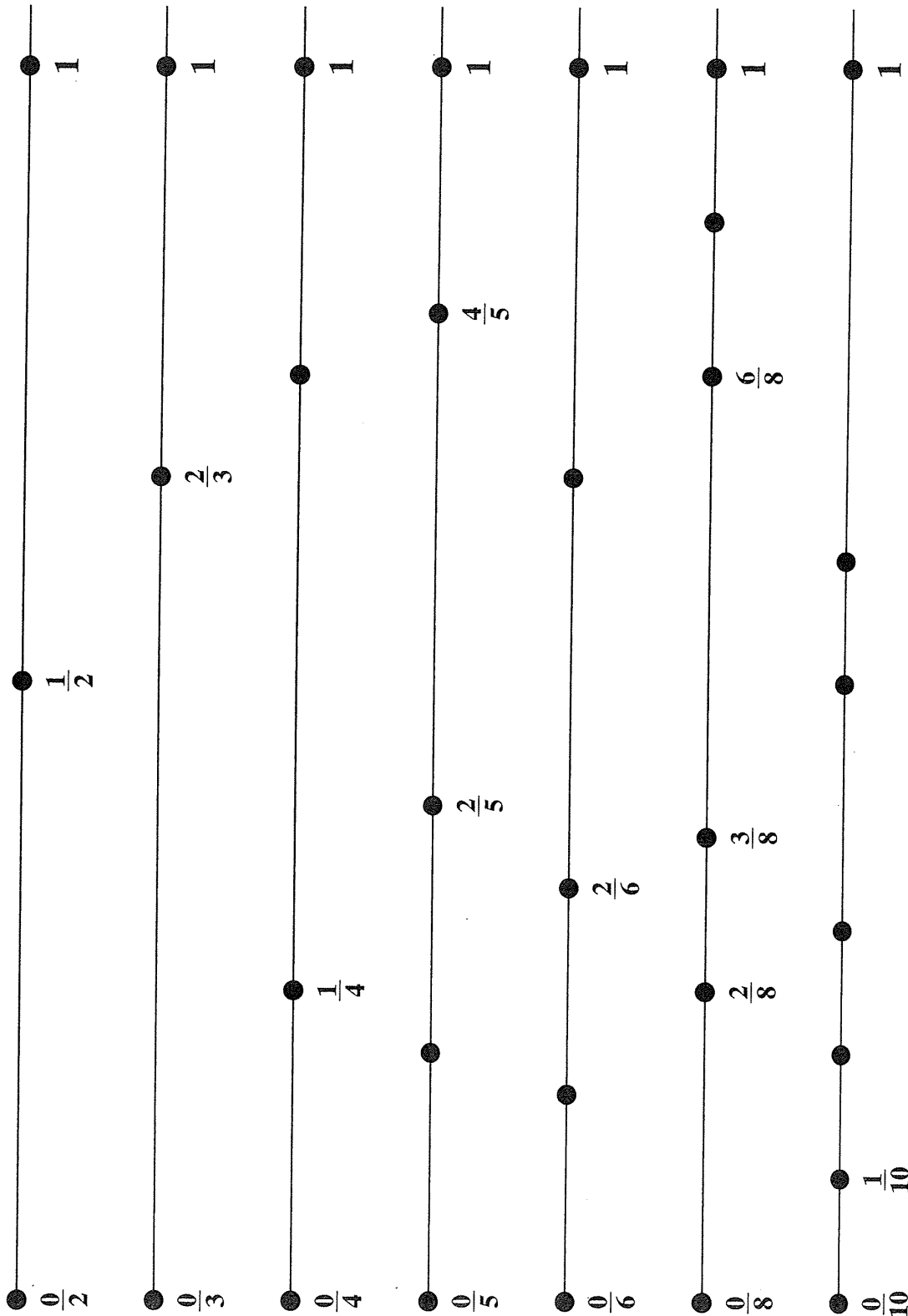
- Playing to 2: extend the tracks to 2 and capture chips by landing on 2.
- Require every play to include moves on more than one track to total the amount shown on the card.

Reference

“What’s That Portion: Fractions and Percents.” A curriculum unit from *Investigations in Number, Data, and Space*. Pearson Education, 2008.

FRACTION TRACK GAMEBOARD, SHEET 1

Tape together with Sheet 2 to make continuous tracks from 0 to 2. Overlap at the 1 dots.



FRACTION TRACK GAMEBOARD, SHEET 2

