

RAFT IDEAS

Topics: Hand-eye Coordination, Problem Solving, Physical Challenges

Materials List

- ✓ Used and/or unwanted binder
- ✓ Moon or cup-shaped pieces
- ✓ Caps
- ✓ Marble
- ✓ Hot or tacky glue
- ✓ Permanent marker
- ✓ Optional: materials to create other obstacles

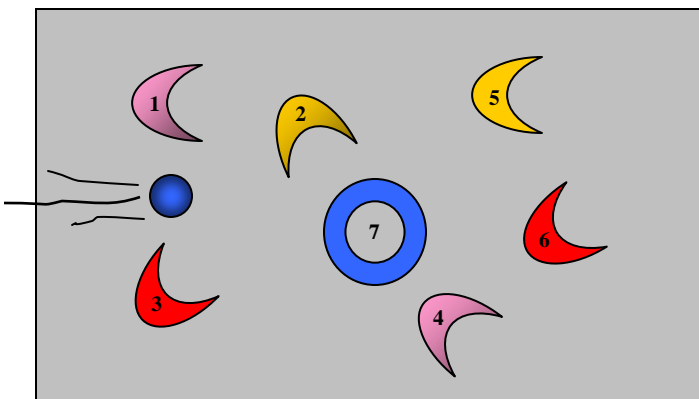
This activity can be used to support the teaching of:

- Problem Solving and Reasoning (Common Core Math Standards: Mathematical Practices Grades K-8)
- Science & Engineering Practices (Next Generation Science Standards: Grades K-8)
- Hand-eye coordination
- Measurement & graphing skills



Hand Tilt Table Game

Shoot for the Moon and Catch the Marble



Similar to the idea of a Labyrinth, players must navigate this board by rolling the marble from cup to cup... but don't fall off!

Assembly

1. Create the game board by cutting off either the front or the back of the binder.
2. Glue moon or cup-shaped pieces to the board in random locations and angles.
3. Glue the cap (open-side-up) onto the board near the center.
4. Allow glue to cool or dry.
5. Use the permanent marker to label the moon pieces and the cap with an order sequence (e.g. – 1,2,3...).

Playing the Game (for any number of players)

1. A player holds the game board in his hands.
2. Place the marble in the cup labeled 1.
3. Roll and move the marble into each consecutive location by tilting the board. At no time can the player touch the marble. If at any time the marble rolls off the table, the player must start over at 1.

Data, Trials, and Graphing:

1. Create several different game boards and label each board with a letter.
2. Have players try each board 3 times and record how well they did each trial on each board.
3. Students can graph the data and compare their findings. Did all students do better on one board than another? Was one board the most difficult? Did students improve after practice?

Extensions:

- Provide timers and have students time one another. Who can finish faster?
- Have players try to navigate a game board by working in a team of 4. At all times, each team member must have 1 hand on a corner of the game board, and they must navigate the course together.
- For an added challenge, make the board 2-sided. To continue play onto the second side, a player must toss the marble into the air, flip the board, and then catch the marble with the board. And remember, touching the marble is NOT allowed!

Web Resources (Visit www.raft.net/raft-idea?isid=99 for more resources!)