



Marble Track Instant Challenge

Creative Logic Activity {for all ages}

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Find all of the Instant Challenge links here: <http://bit.ly/YU2Wy7>



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INSTANT CHALLENGE - MARBLE TRACK

Challenge: Create a track for a marble and guide the marble into an 8" taped square and have the marble remain in the square.

Time: Teams will have one minute to collaborate on ideas, five minutes to build a track, and then 1 minute to roll the marble to achieve a score.

Set-up: Each team will have an 8" square in their area along with the materials needed for the project.

Procedure:

~ Part One {1 minute}: The team members will talk together and brainstorm ideas on building the marble track. They may use a pencil to sketch out designs on the back of their instruction papers. If they complete their brainstorming before the one minute is over, they may proceed to Part 2.

~ Part Two {5 minutes}: The team will use the provided materials to create a track for the marble. Once a track is built, they may practice rolling the marble, but no scores will be given at this point. In order to move onto the next part, teams must have a completed track at the end of Part Two. Time warnings will be given when 1 minute remains on the timer and also at 30 seconds remaining.

~ Part Three {1 minute}: Team will have 1 minute to roll the marble on the track to receive score. The marble may not be pushed or prodded on the track and must move by itself in order for a score to be earned. The marble must land and stay within the 8" taped square in order to receive a score. No team member should touch or support either the track or the marble once the marble has been released and is rolling on the track. At the end of Part Three, the teachers will measure the distance that the marbles traveled on the track from the point where the marble was started and where the marble lands in the taped square.

Materials Needed {per team}:

~ 1 piece of Cardstock	~ 5 mailing labels	~ 1 piece of string	~ 4 paper clips
~ 3 straws	~ 3 rubber bands	~ 2 pencils	~ 1 marble

Note: the mailing labels may NOT be attached to the floor in any way.

Scoring: Teams will receive

- 25 points if a marble ends in the taped square at the end of Part Three.
- 1 point for each INCH that the marble travels on the track ~ measured from the point where the marble was dropped to the point where the marble lands.
- Up to 30 points for creative use of materials
- Up to 25 points for how the team works together.

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MARBLE TRACK

Materials

{Per participating team}

1 piece of Cardstock

5 mailing labels

1 piece of string

4 paper clips

3 straws

3 rubber bands

2 pencils

1 marble

{additional supplies}

Ruler or measuring tape

Painters or masking tape



INSTANT CHALLENGE - FOR TEACHERS ONLY

1. There should be separate areas set up for each of the teams so that they can work together and independently without another team looking on. Each area should have an 8" square taped on the floor.
2. Be sure to warn the teams when only 1 minute remains in part two and again when 30 seconds remain on the clock.
3. If a team member touches the track or the marble during the rolling in part three, give a warning . Any points that may have been earned should not be awarded. They may re-roll their marble if there is time remaining on the clock.
4. The tracks the teams develop may land within the taped square area and the track can be in multiple pieces. Tracks will vary as creativity varies, so keep an open mind on appearances.

Point Chart:

	Team 1		Team 2		Team 3		Team 4	
	A		A		A		A	
	B		B		B		B	
	C		C		C		C	
	D		D		D		D	
Total Points:								
Notes:								

Scoring: Teams will receive...

- A. 25 points if a marble ends in the taped square at the end of Part Three.
- B. 1 point for each INCH that the marble travels on the track ~ measured from the point where the marble was dropped to the point where the marble lands.
- C. Up to 30 points for creative use of materials
- D. Up to 25 points for how the team works together.



INSTANT CHALLENGE - MARBLE TRACK

Challenge: Create a track for a marble and guide the marble into an 8" taped square and have the marble remain in the square.

Time: Your team will have one minute to collaborate on ideas, five minutes to build a track, and then 1 minute to roll the marble to achieve a score.

Set-up: Your team will have an 8" square in your area along with the materials needed for the project.

Procedure:

Part One {1 minute}

- Talk together and brainstorm ideas.
- You may use a pencil to sketch out designs on the back of your instruction papers.
- If you complete brainstorming before the one minute is over, you may proceed to Part 2.

Part Two {5 minutes}

- Use the provided materials to create a track for the marble.
- **Note: the mailing labels may NOT be attached to the floor in any way.**
- You may practice rolling the marble, but no scores will be given at this point
- You must have a completed track at the end of Part Two.
- Time warnings will be given when 1 minute remains and also at 30 seconds remaining.

Part Three {1 minute}

- Your team will have 1 minute to roll the marble on the track to receive score.
- The marble may not be pushed or prodded on the track and must move by itself in order for a score to be earned.
- The marble must land and stay within the 8" taped square in order to receive a score.
- No team member should touch or support either the track or the marble once the marble has been released and is rolling on the track.

Scoring: Teams will receive...

- A. 25 points if a marble ends in the taped square at the end of Part Three.
- B. 1 point for each INCH that the marble travels on the track ~ measured from the point where the marble was dropped to the point where the marble lands.
- C. Up to 30 points for creative use of materials
- D. Up to 25 points for how the team works together.

