WORLD ROBOT OLYMPIAD ™

RoboMission

Senior Extra Task

Season 2026



Mosaic Masters

The Red Mosaic Tile

Extra Task for the WRO International Final
Version October 8th 2026
To be used with the WRO 2026 Senior season rules

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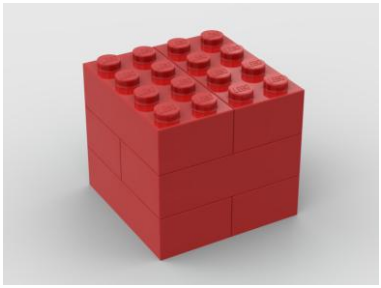
1 Introduction

A special red tile has been discovered among the restoration materials. Your robot must collect it from its starting square and place it in the red cell of the mosaic. Accurate placement earns more points than a regular coloured tile.

2 Game objects and positioning

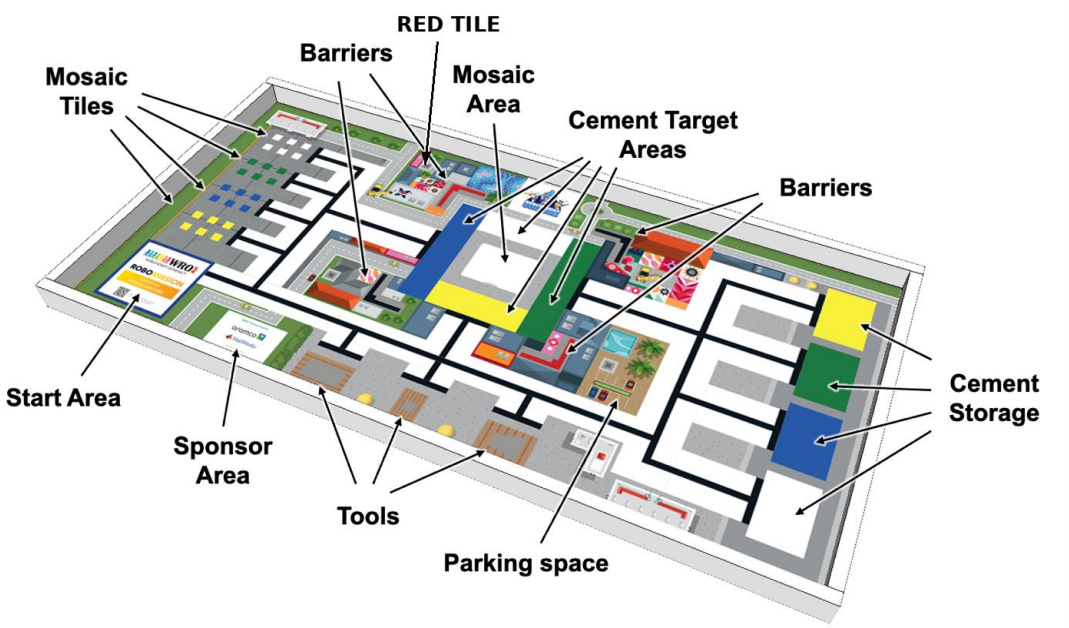
Red mosaic tile

One red mosaic tile is added to the field. It is built from six red 2×4 bricks, arranged as a 4×4 square in three layers. The middle layer is rotated by 90 degrees to connect the bricks. Its size and construction match the regular mosaic tiles.



Initial position

Place the red tile flat, with its studs facing up, centred on the uppermost unused grey square between the mosaic tile storage area and the mosaic frame, as indicated below. Align its edges with the edges of the grey square. This starting position is fixed in every round.



The arrow labelled Red tile start identifies the starting square.

All 24 regular mosaic tiles remain in their season starting positions. The other game objects and their setup remain as described in the Senior season rules.

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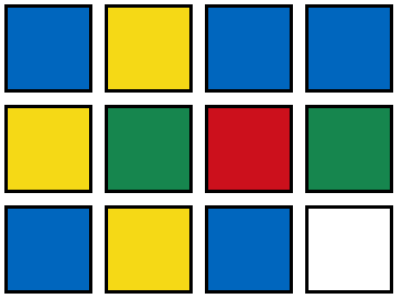
3 Robot mission

Complete the red part of the mosaic

Collect the red tile and place it in the red cell of the mosaic frame. Solving the extra task is optional; the red tile and red target cell are always included in the field setup.

Mosaic pattern and randomization

For each round, generate the usual 12-cell season mosaic pattern, then randomly select one of its cells and change that cell to red. The printed pattern must contain exactly one red cell and eleven cells in the regular season colours. Place the pattern under the unchanged mosaic frame. Cement randomization follows the season rules.



Exactly one red cell

Eleven regular colour cells

Same 12-cell mosaic frame

Illustration only The actual pattern is randomized each round

Scoring conditions

Correctly placed means that the red mosaic tile is only touching the red coloured area in the mosaic frame and stands evenly on the ground.

Partly or unevenly placed. The intact red tile directly touches the pattern paper in the red cell, but does not meet all conditions for correct placement. This includes a tile partly outside the red cell or tilted against the frame.

No score. The red tile does not directly touch the paper in the red cell, is only in a different-coloured cell, is stacked on another tile, or is damaged. Damaged means it is no longer assembled as at the start, for example because a brick has detached.

Red tile condition at the end of the run	Each	Max.
Correctly placed in the red cell.	**30**	**30**
Partly or unevenly placed, touching the paper in the red cell.	10	
Any other placement, or damaged.	0	

The red tile scores once, using the highest applicable score. It never earns the regular mosaic tile points. Only one tile may score per cell. A regular-coloured tile in the red cell scores the regular tiles score of 5 points under the season rules.

Building instructions and pieces

Build one red tile per field using the building instructions.

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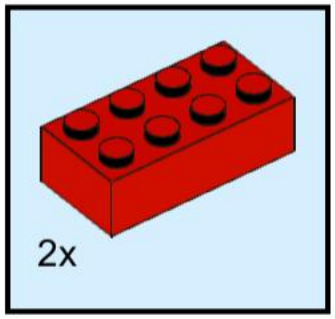
4 Scoring sheet

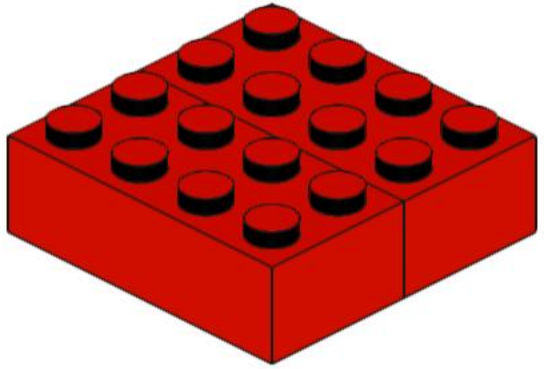
Team name: _____ Round: _____

Tasks	Each	Max.	#	Total
1. Provide the tools				
The rectangular trowel is completely in the sponsor area.	**15**	**15**		
The rectangular trowel is partly in the sponsor area.	5			
The cement bowl is completely in the parking space.	**15**	**15**		
The cement bowl is partly in the parking space.	5			
The masonry trowel is completely in the start area.	**15**	**15**		
The masonry trowel is partly in the start area.	5			
2. Put the mosaic in place				
Mosaic tile correctly placed in the mosaic frame.	**10**	**110**		
Mosaic tile incorrectly placed in the mosaic frame.	5			
3. Deliver the cement				
Cement element is completely in corresponding-coloured cement target area	**1**	**40**		
4. Bonus for barriers				
Barrier is not damaged or moved	**7**	**28**		
5 Extra task The Red Mosaic Tile				
Red tile correctly placed in the red cell.	30	**30**		
Red tile partly or unevenly placed, touching the red cell.	10			
Maximum Score		**253**		
			Total Score in this run	
			Time in full seconds	

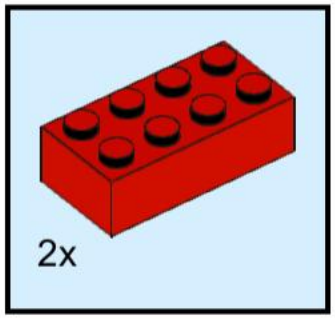
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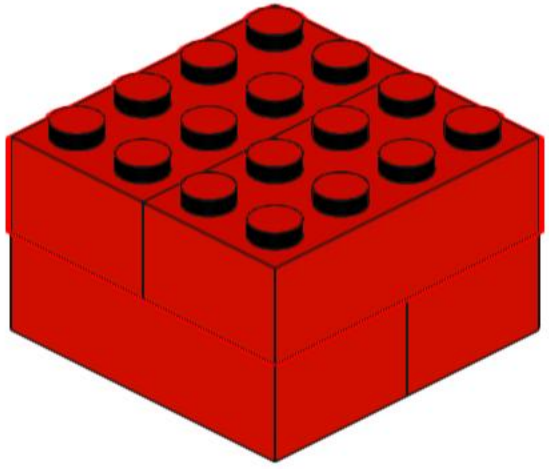
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