#STEMChallengesMIC

MIC Maths Puzzles

for Maths Week



www.mathsweek.ie





Take a picture of your designs & tag us in your posts!

- **MICLimerick**, @mathsweek, @ListonMaeve
- @maryimmaculatecollegeireland, @MathsWeek
- (c) @miclimerick, @mathsireland







for Maths Week

To celebrate Maths Week from Saturday 10 October to Sunday 18 October 2020, Mary Immaculate College (MIC) are bringing you lots of different fun maths puzzles for you to do at home or at school. These puzzles can be done on your own or as part of a team.

You will be able to source all of the materials needed for each puzzle from what you have in your home or classroom.

We would love to see some of your solutions to these puzzles so be sure to get your parents or teachers to take a picture of your solution and tag us in their social media posts using #STEMChallengesMIC.

- MICLimerick, @mathsweek, @ListonMaeve
- **f** @maryimmaculatecollegeireland, @MathsWeek
- @miclimerick, @mathsireland

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What you need to do to complete the puzzle:

 You will need 12 different coloured blocks, lego bits, sweets or whatever you can find. Just make sure you have 3 different colours and 4 blocks of each colour

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- 2. Arrange the blocks as shown in the picture
- 3. Your task is to look carefully at the top 2 rows and then decide which row comes next. Row A or Row B



What you need to do to complete the puzzle:

1. You will need 6 different coloured chopsticks, straws, pencils or whatever you can find. Just make sure you have 6 pieces in 3 different colours

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- 2. Arrange the pieces as shown in the picture.
- 3. Your task is to arrange the 6 pieces so that each piece touches all of the others.
- 4. Take your time, there will be lots of moving around.
- 5. Remember: All 6 pieces must touch each other.



What you need to do to complete the puzzle:

- 1. You will need 4 straws, pencils, chopsticks, knitting needles or whatever you can find.
- 2. Arrange the pieces as shown in the picture so that the shape looks like a glass.

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- 3. Next place a small item (whatever you can find at home), we have used a cocktail umbrella, outside the glass shape. Make sure it fits under the middle line to the right of the shape as per the photo.
- 4. Your task is to get the cocktail umbrella into the glass just by moving 2 straws.
- 5. Remember: The cocktail umbrella must remain where it is. You can only move two straws



What you need to do to complete the puzzle:

1. You will need 4 straws, pencils, cocktail sticks, hairclips or matches.

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- 2. Set up the pieces as shown in the picture.
- 3. Your task is to make a square from the pieces.
- 4. However there is one rule, you can only move 1 match/piece.



What you need to do to complete the puzzle:

1. You will need 15 straws, pencils, cocktail sticks, hairclips or matches.

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- 2. Set up the pieces as shown in the picture to give 5 squares
- 3. Your task is to leave 3 squares just by removing 3 pieces/matches from the puzzle.



What you need to do to complete the puzzle:

1. You will need straws, pencils, cocktail sticks, hairclips or matches and 9 coins

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- 2. Set up the pieces as shown in the picture.
- 3. Each through line should link 3 coins together.
- 4. When the puzzle is set up as per the picture, there should be 8 through lines.
- 5. Can you find them all?
- 6. Your task is to move just one coin with its connecting sticks to make 9 through lines.



What you need to do to complete the puzzle:

1. You will need 15 pencils, cocktail sticks, or rulers.

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- 2. Set up the pieces as shown in the picture in 3 squares.
- 3. Your task is to move 6 pencils to make ten.









What you need to do to complete the puzzle:

- 1. Look at the triangles numbered 1 to 4.
- 2. The number in the middle of each triangle is reached by doing a calculation with the numbers in each corner.

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- The calculation in each triangle is the same. i.e. the calculation used in triangle 1 is the same as triangle 2 and so on.
- 4. Can you work out what the calculation is?
- 5. Triangle 3 and 4 are a little trickier. Can you work out the missing number in each triangle?